# Oracle® Communications Convergent Charging Controller

Data Access Pack Compliance Protocol Implementation Conformance Statement

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# **About This Document**

# Scope

This statement of compliance compares the Oracle DAP implementation to:

- Internet Engineering Task Force (IETF) document, RFC 2616 Hypertext Transfer Protocol -HTTP/1.1
- Web Services Description Language (WSDL) 1.1
- JSR 181: Web Services Metadata for the JavaTM Platform
- JSR 224: JavaTM API for XML-Based Web Services (JAX-WS) 2.1

# **Audience**

This document is intended to be read by Oracle Communications Convergent Charging Controller staff. It has been prepared on the assumption that the reader is familiar with DAP as well as the HTTP and SOAP protocol specifications.

# **Document Conventions**

# **Typographical Conventions**

The following terms and typographical conventions are used in the Oracle Communications Convergent Charging Controller documentation.

| Formatting Convention       | Type of Information  |
|-----------------------------|--|
| Special Bold                | Items you must select, such as names of tabs.  |
|                             | Names of database tables and fields.   |
| Italics                     | Name of a document, chapter, topic or other publication.                                     |
|                             | Emphasis within text.  |
| Button                      | The name of a button to click or a key to press.   |
|                             | <b>Example:</b> To close the window, either click <b>Close</b> , or press <b>Esc</b> .       |
| Key+Key                     | Key combinations for which the user must press and hold down one key and then press another. |
|                             | Example: Ctrl+P or Alt+F4.   |
| Monospace                   | Examples of code or standard output.   |
| Monospace Bold              | Text that you must enter.  |
| variable                    | Used to indicate variables or text that should be replaced with an actual value.             |
| menu option > menu option > | Used to indicate the cascading menu option to be selected.                                   |
|                             | Example: Operator Functions > Report Functions   |
| hypertext link              | Used to indicate a hypertext link.   |

Specialized terms and acronyms are defined in the glossary at the end of this guide.

# **Compliance Statement**

# Overview

# Introduction

This chapter describes the compliance/ non-compliance of protocols supported by DAP to various globally accepted compliance documents.

# In this chapter

This chapter contains the following topics. HTTP Compliance ......1 SOAP Compliance.....8 

# **HTTP Compliance**

# **Description**

This section demonstrates the compliance/ non-compliance of the HTTP protocol support in DAP to the compliance statement for RFC 2616.

# 3.2.3 URI Comparison

Compliant: No

Note: DAP does not differentiate based on request URL, only on the correlation ID.

#### 3.1 HTTP Version

Compliant: No

Note: DAP only accepts HTTP/1.1 requests.

#### 3.3 Date/Time Formats

Compliant: No

Note: DAP does not support sending timestamps in these formats.

#### 3.4 Character Sets

Compliant: No

Note: DAP only support ASCII, although DAP advertises UTF-8.

#### 3.5 Content Codings

Compliant: No

Note: DAP does not support any content codings.

#### 3.6 Transfer Codings

Compliant: No

Note: DAP will only send non-chunked requests, but does handle chunked responses. DAP does not

handle chunked requests.

# 3.7 Media Types

Compliant: Yes

Note: DAP produces content of type text/html and text/xml. It does not verify the content-type of

responses, but assumes text/xml or text/html.

# 4.1 HTTP Message Types

Compliant: Yes

Note: DAP ignores leading CRLF's on new connections.

#### 4.2 HTTP Message Headers

Compliant: Yes

# 5.1.1 Request-Line Method

Compliant: Yes

Note: DAP ignores URI and Method in asynchronous responses.

# 5.2 Resource identified by a request

Compliant: No

Note: DAP ignores the Request-URI.

## 6.1.1 Status code and reason phrase

Compliant: No

Note: DAP only accepts 200 OK as success.

#### **8.1 Persistent Connections**

Compliant: No

Note: DAP does not maintain a persistent connection if it is the server.

# 8.1.2.1 Overall Operation - Negotiation

Compliant: No

Note: DAP does not honour the "close" request, assuming that the client connections it initiates are

persistent.

# 8.2.3 Use of the 100 (Continue) Status

Compliant: No

Note: DAP does not handle request headers.

# 9.2 OPTIONS

Compliant: No

Note: OPTIONS is not supported.

9.3 **GET** 

Compliant: Yes

Note: DAP does not differentiate between request methods, so GET/POST/PUT, etc are supported.

**9.4 HEAD** 

Compliant: No

Note: DAP does not properly process HEAD.

**9.5 POST** 

Compliant: Yes

9.6 PUT

Compliant: No

Note: DAP does not support TRACE

9.9 CONNECT

Compliant: No

Note: DAP does not support CONNECT.

10.1 Informational 1xx

Compliant: No

Note: DAP only accepts 200/OK.

10.2 Successful 2xx

Compliant: No

Note: DAP only accepts 200/OK.

10.3 Redirection 3xx

Compliant: No

Note: DAP does not accept re-direction.

10.4 Client Error 4xx

Compliant: Yes

Note: DAP treats all non-200/OK status as errors.

10.4.2 401 Unauthorized

Compliant: No

Note: DAP does not support HTTP Authentication.

10.5 Server Error 5xx

Compliant: Yes

Note: DAP treats all non-200/OK status as errors.

#### 11 Access Authentication

Compliant: No

Note: DAP does not support HTTP Authentication.

#### **12 Content Negotiation**

Compliant: No

Note: DAP does not support negotiation.

# 13 Caching in HTTP

Compliant: NA

Note: DAP attempts to force all responses to be uncached.

#### 14.5 Accept-Ranges

Compliant: No

Note: DAP does not produce nor accept Accept headers.

# 14.6 Age

Compliant: NA

Note: DAP assumes no caching.

#### 14.7 Allow

Compliant: Yes

Note: DAP treats all non 200/OK status as errors.

# 14.8 Authorization

Compliant: No

Note: DAP does not support HTTP Authentication.

# 14.9 Cache-Control

Compliant: Yes

Note: DAP attempts to force non-caching of responses.

# 14.10 Connection

Compliant: No

Note: DAP does not support the Connection header.

## 14.11 Content-Encoding

Compliant: No

Note: DAP does not support Content-Encoding

# 14.12 Content-Language

Compliant: No

Note: DAP does not support Content-Language.

14.13 Content-Length

Compliant: Yes

14.14 Content-Location

Compliant: No

Note: DAP does not differentiate on URI.

14.15 Content-MD5

Compliant: No

Note: DAP does not process Content-MD5.

14.16 Content-Range

Compliant: No

Note: DAP does not support Content-Range.

14.17 Content-Type

Compliant: Yes

Note: DAP only supports text/xml,text/html and UTF-8 encoding, when UTF-8 is limited to the ASCII

subset.

14.18 Date

Compliant: No

Note: DAP does not produce a Date header.

14.19 ETag

Compliant: No

Note: DAP does not provide an ETag.

**14.20 Expect** 

Compliant: No

Note: DAP does not support Expect or 100 continue.

14.21 Expires

Compliant: No

Note: DAP assumes that caching is not present.

14.22 From

Compliant: Yes

Note: DAP does not send, nor process the From field.

14.23 Host

Compliant: Yes

Note: DAP populates the Host field.

#### 14.24 If-Match

Compliant: No

Note: DAP does not set, nor honour the If-Match field.

#### 14.25 If-Modified-Since

Compliant: No

Note: DAP does not set, nor honour the If-Modified-Since field.

#### 14.26 If-None-Match

Compliant: No

Note: DAP does not set, nor honour the If-None-Match field.

#### 14.27 If-Range

Compliant: No

Note: DAP does not set, nor honour the If-Range field.

#### 14.28 If-Unmodified-Since

Compliant: No

Note: DAP does not set, nor honour the If-Unmodified-Since field.

#### 14.29 Last-Modified

Compliant: No

Note: DAP does not set, nor honour the Last-Modified field.

# 14.30 Location

Compliant: No

Note: DAP does not set, nor honour the Location field. All HTTP status other than 200/OK are treated

as errors.

# 14.31 Max-Forwards

Compliant: No

Note: DAP does not set, nor honour the Max-Forwards field.

# 14.32 Pragma

Compliant: No

Note: DAP does not set, nor honour the Pragma field.

# 14.33 Proxy-Authenticate

Compliant: No

Note: DAP does not set, nor honour the Proxy-Authenticate field.

# 14.34 Proxy-Authorization

Compliant: No

Note: DAP does not set, nor honour the Proxy-Authorization field.

14.35 Range

Compliant: No

Note: DAP does not support byte ranges.

14.36 Referer

Compliant: No

Note: DAP does not set, nor read the Referer field.

14.37 Retry-After

Compliant: No

Note: DAP does not set, nor honour the Retry-After field.

**14.38 Server** 

Compliant: Yes

Note: DAP does set the Server field.

14.39 TE

Compliant: No

Note: DAP does not set, nor honour the TE field.

14.40 Trailer

Compliant: No

Note: DAP does not support non-empty Trailers, so it does not set the Trailer field.

14.41 Transfer-Encoding

Compliant: Yes

Note: DAP does support Transfer-Encoding of chunked.

14.42 Upgrade

Compliant: No

Note: DAP does not support set, nor honour the Upgrade field.

14.43 User-Agent

Compliant: Yes

Note: DAP sets the User-Agent field.

14.44 Vary

Compliant: No

Note: DAP does not set, nor honour the Vary field.

14.45 Via

Compliant: No

Note: DAP does not set, nor honour the Via field.

#### 14.46 Warning

Compliant: No

Note: DAP does not set, nor honour the Warning field.

#### 14.47 WWW-Authenticate

Compliant: No

Note: DAP does not perform HTTP Authentication.

# **SOAP Compliance**

# Description

This section demonstrates the compliance/ non-compliance of the SOAP protocol support in DAP to the Web Services Description Language (WSDL) 1.1.

## Section 2.1

Compliant: Partial

## Section 2.2

Compliant: Yes

#### Section 2.3

Compliant: Partial

Note: DAP does not place any meaning on actor attributes in responses, nor does it provide a way to

populate them.

# Section 2.4

Compliant: No

Note: DAP does not process or place any meaning on SOAP headers.

# Section 2.5

Compliant: No

Note: DAP does not process or place any meaning on SOAP headers, particularly mustUnderstand.

# Section 3

Compliant: No

Note: DAP does not process or validate namespace identifiers.

#### Section 4

Compliant: Yes

#### Section 4.1.1

Compliant: Partial

Note: SOAP encoding style support is incomplete. Support for HREF references is not supported.

Section 4.1.2

Compliant: No

Note: DAP does not validate SOAP headers.

Section 4.2

Compliant: Partial

Note: DAP does not place any meaning on actor attributes in responses, nor does it provide a way to populate them. DAP does not process or place any meaning on SOAP headers, particularly

mustUnderstand.

Section 4.2.1

Compliant: No

Note: DAP does not ignore invalid SOAP Header attributes.

Section 4.2.2

Compliant: NA

**Note:** DAP does not proxy requests, so this section does not apply.

Section 4.2.3

Compliant: No

Note: DAP does not honour the mustUnderstand attribute.

Section 4.3

Compliant: No

**Note:** DAP does not provide a namespace for the body block.

Section 4.3.1

Compliant: Yes

Section 4.4

Compliant: No

Note: DAP is unable to generate Fault blocks, although it is able to process them.

Section 4.4.1

Compliant: Partial

Note: DAP is unable to generate Fault blocks.

Section 4.4.2

Compliant: No

**Note:** DAP is unable to process or generate header faults.

Section 5

Compliant: Partial

Note: DAP is unable to process type information in responses.

#### Chapter 1

#### Section 5.1

Compliant: Partial

Note: DAP is unable to process references (href) in responses.

#### Section 5.2

Compliant: Partial

Note: DAP is unable to process type information in responses.

#### Section 5.2.1

Compliant: Partial

Note: DAP does not support the id or href attributes in requests or responses.

#### Section 5.2.2

Compliant: Yes

#### Section 5.2.3

Compliant: Yes

Note: Binary encodings are supported subject to parameter size restrictions and type conversion

requirements.

## Section 5.3

Compliant: No

Note: DAP is unable to process type information in responses.

# Section 5.4

Compliant: Yes

#### Section 5.4.1

Compliant: Partial

Note: DAP is unable to process references to values.

# Section 5.4.2

Compliant: Partial

#### Notes:

- DAP does not process encodings.
- All repeated elements are treated as arrays.
- Multi-dimensional arrays are not supported.

#### **Section 5.4.2.1**

Compliant: No

**Note:** Partially transmitted arrays are not supported. DAP will treat them as all other repeated elements.

# **Section 5.4.2.2**

Note: Sparse arrays are not supported. DAP will treat them as all other repeated elements.

Section 5.4.3

Compliant: Yes

Section 5.5

Compliant: Yes

Section 5.6

Compliant: No

**Note:** DAP does not support roots other than the true root of the graph.

Section 6

Compliant: Yes

Section 6.1.1

Compliant: Yes

Section 6.2

Compliant: No

Note: DAP does not generate SOAP fault elements, nor does it generate 500 Internal Server Errors.

Section 6.3

Compliant: No

Note: We don't support HTTP extensions.

Section 7.1

Compliant: Partial

Note: DAP is able to process SOAP faults, but it is not able to generate them.

Section 7.2

Compliant: No

Note: The example has the transaction ID being passed as part of the SOAP header element. DAP does not support placing fields into the SOAP header.

# **EJB JEE Compliance**

# **JSR 181**

This section demonstrates the compliance/ non-compliance of the subset of EJB standards that are supported by DAP to the compliance statement for JSR 181: Web Services Metadata for the JavaTM Platform.

Section 4.1.1

Compliant: Partial

**Note:** javax.jws.WebService.targetNamespace is not supported if it results in namespace prefixes on elements.

#### Section 4.2

Compliant: Yes

#### Section 4.3

Compliant: Yes

#### Section 4.4

Compliant: Partial

#### Notes:

- javax.jws.WebParam.targetNamespace is not supported if it results in namespace prefixes on elements.
- javax.jws.WebParam.header=true is not supported.

#### Section 4.5

Compliant: Partial

#### Notes:

- javax.jws.WebParam.targetNamespace is not supported if it results in namespace prefixes on elements.
- javax.jws.WebParam.header=true is not supported.

#### Section 4.6

Compliant: Yes

Note: Does not affect the generated WSDL file.

#### Section 4.7

Compliant: Yes

Note: javax.jws.soap.SOAPBinding is a required annotation.

#### Section 4.8

Compliant: Yes

Note: Ignored in the standard.

# Section 5

Compliant: Partial

Note: JAXB or SDO is not supported, only SOAP bindings are supported.

# Section 6.1

Compliant: Yes

# Section 6.2

Compliant: No

Note: @WebParam.header is not supported.

# **JSR 224**

This section demonstrates the compliance/ non-compliance of the subset of EJB standards that are supported by DAP to the compliance statement for JSR 224: JavaTM API for XML-Based Web Services (JAX-WS) 2.1.

# 2.1 WSDL 1.1 support

Compliant: Yes

# 2.2 Customization required

Compliant: NA

# 2.3 Annotations on generated classes

Compliant: NA

# 2.4 Definitions mapping

Compliant: NA

# 2.5 WSDL and XML Schema import directives

Compliant: Partial

Note: References WS-I Basic Profile 1.1, which is not reviewed. DAP supports schema import

directives.

#### 2.6 Optional WSDL extensions

Compliant: NA

# 2.7 SEI naming

Compliant: NA

# 2.8 javax.jws.WebService required

Compliant: NA

#### 2.9 javax.xml.bind.XmlSeeAlso required

Compliant: NA

#### 2.10 Method naming

Compliant: NA

# 2.11 javax.jws.WebMethod required

Compliant: NA

# 2.12 Transmission primitive support

Compliant: NA

# 2.13 Using javax.jws.OneWay

2.14 Using javax.jws.SOAPBinding

Compliant: NA

2.15 Using javax.jws.WebParam

Compliant: NA

2.16 Using javax.jws.WebResult

Compliant: NA

2.17 use of JAXB annotations

Compliant: NA

2.18 Non-wrapped parameter naming

Compliant: NA

2.19 Default mapping mode

Compliant: NA

2.20 Disabling wrapper style

Compliant: NA

2.21 Wrapped parameter naming

Compliant: NA

2.22 Parameter name clash

Compliant: NA

2.23 Using javax.xml.ws.RequestWrapper

Compliant: NA

2.24 Using javax.xml.ws.ResponseWrapper

Compliant: NA

2.25 Use of Holder

Compliant: NA

2.26 Asynchronous mapping required

Compliant: No

Note: Asynchronous EJB responses are not supported using this version of DAP.

2.27 Asynchronous mapping option

Compliant: No

Note: Asynchronous EJB responses are not supported using this version of DAP.

2.28 Asynchronous method naming

Compliant: No

Note: Asynchronous EJB responses are not supported using this version of DAP.

2.29 Asynchronous parameter naming

Compliant: No

Note: Asynchronous EJB responses are not supported using this version of DAP.

2.30 Failed method invocation

Compliant: No

Note: Asynchronous EJB responses are not supported using this version of DAP.

2.31 Response bean naming

Compliant: No

Note: Asynchronous EJB responses are not supported using this version of DAP.

2.32 Asynchronous fault reporting

Compliant: No

Note: Asynchronous EJB responses are not supported using this version of DAP.

2.33 Asychronous fault cause

Compliant: No

Note: Asynchronous EJB responses are not supported using this version of DAP.

2.34 JAXB class mapping

Compliant: NA

2.35 JAXB customization use

Compliant: NA

2.36 JAXB customization clash

Compliant: NA

2.37 javax.xml.ws.wsaddressing.W3CEndpointReference

Compliant: NA

2.38 javax.xml.ws.WebFault required

Compliant: NA

2.39 Exception naming

Compliant: NA

2.40 Fault equivalence

Compliant: NA

2.41 Fault equivalence

2.42 Required WSDL extensions

Compliant: NA

2.43 Unbound message parts

Compliant: NA

2.44 Duplicate headers in binding

Compliant: NA

2.45 Duplicate headers in message

Compliant: NA

2.46 Use of MIME type information

Compliant: NA

2.47 MIME type mismatch

Compliant: NA

2.48 MIME part identification

Compliant: NA

2.49 Service superclass required

Compliant: NA

2.50 Service class naming

Compliant: NA

2.51 javax.xml.ws.WebServiceClient required

Compliant: NA

2.52

Compliant: NA

2.53

Compliant: NA

2.54 Failed getPort Method

Compliant: NA

2.55 javax.xml.ws.WebEndpoint required

Compliant: NA

3.1 WSDL 1.1 support

Compliant: Yes

3.2 Standard annotations

Compliant: Partial

Note: Not all annotations are supported. See section 7 for details.

3.3 Java identifier mapping

Compliant: Yes

3.4 Method name disambiguation

Compliant: Yes

3.5 Package name mapping

Compliant: Partial

Note: Namespaces which modify the prefixes on response messages are not supported.

3.6 WSDL and XML Schema import directives

Compliant: Yes

3.7 Class mapping

Compliant: Yes

3.8 portType naming

Compliant: Yes

3.9 Inheritance flattening

Compliant: Yes

3.10 Inherited interface mapping

Compliant: Yes

3.11 Operation naming

Compliant: Yes

3.12 One-way mapping

Compliant: Yes

3.13 One-way mapping errors

Compliant: Yes

3.14 use of JAXB annotations

Compliant: Partial

3.15 Parameter classification

Compliant: Yes

3.16 Parameter naming

Compliant: Yes

3.17 Result naming

Compliant: Yes

#### 3.18 Header mapping of parameters and results

Compliant: No

Note: javax.jws.WebParam.header=true and javax.jws.WebResult.header=true are not supported.

#### 3.19 Default wrapper bean names

Compliant: Yes

# 3.20 Default wrapper bean package

Compliant: Yes

# 3.21 Wrapper element names

Compliant: Yes

#### 3.22 Wrapper bean name clash

Compliant: Yes

# 3.23 Null Values in rpc/literal

Compliant: Partial

Note: DAP does not generate exceptions for NULL values when it receives them in asynchronous

responses.

# 3.24 Exception naming

Compliant: Yes

# 3.25 java.lang.RuntimeExceptions and java.rmi.RemoteExceptions

Compliant: Yes

#### 3.26 Fault bean name clash

Compliant: Yes

# 3.27 Binding selection

Compliant: Partial

Note: Only SOAP1.1/HTTP binding is supported.

# 3.28 SOAP binding support

Compliant: Yes

# 3.29 SOAP binding style required

Compliant: Yes

#### 3.30 Service creation

Compliant: Yes

#### 3.31 Port selection

Compliant: Yes

3.32 Port binding

Compliant: Yes

4.1 Service completeness

Compliant: NA

4.2 Service Creation Failure

Compliant: NA

4.3 Use of Executor

Compliant: NA

4.4 Default Executor

Compliant: NA

4.5 javax.xml.ws.BindingProvider.getEndpointReference

Compliant: NA

4.6 Message context decoupling

Compliant: NA

4.7 Required BindingProvider properties

Compliant: NA

4.8 Optional BindingProvider properties

Compliant: NA

4.9 Additional context properties

Compliant: NA

4.10 Asynchronous response context

Compliant: No

Note: Asynchronous EJB responses are not supported using this version of DAP.

4.11 Proxy support

Compliant: NA

4.12 Implementing BindingProvider

Compliant: NA

4.13 Service.getPort failure

Compliant: NA

4.14 Remote Exceptions

# 4.15 Exceptions During Handler Processing

Compliant: NA

4.16 Other Exceptions

Compliant: NA

4.17 Dispatch support

Compliant: NA

4.18 Failed Dispatch.invoke

Compliant: NA

4.19 Failed Dispatch.invokeAsync

Compliant: NA

4.20 Failed Dispatch.invokeOneWay

Compliant: NA

4.21 Reporting asynchronous errors

Compliant: No

Note: Asynchronous EJB responses are not supported using this version of DAP.

4.22 Marshalling failure

Compliant: NA

4.23 Use of the Catalog

Compliant: No

Note: The delivery of WSDL files as jar files is not supported.

5.1 Provider support required

Compliant: NA

5.2 Provider default constructor

Compliant: NA

5.3 Provider implementation

Compliant: NA

5.4 WebServiceProvider annotation

Compliant: NA

5.5 Endpoint publish(String address, Object implementor) Method

Compliant: NA

5.6 Default Endpoint Binding

5.7 Other Bindings

Compliant: NA

5.8 Publishing over HTTP

Compliant: NA

5.9 WSDL Publishing

Compliant: NA

5.10 Checking publishEndpoint Permission

Compliant: NA

5.11 Required Metadata Types

Compliant: NA

5.12 Unknown Metadata

Compliant: NA

5.13 Use of Executor

Compliant: NA

5.14 Default Executor

Compliant: NA

6.1 Read-only handler chains

Compliant: NA

6.2 Concrete javax.xml.ws.spi.Provider required

Compliant: NA

6.3 Provider createAndPublishEndpoint Method

Compliant: NA

6.4 Concrete javax.xml.ws.spi.ServiceDelegate required

Compliant: NA

6.5 Protocol specific fault generation

Compliant: NA

6.6 Protocol specific fault consumption

Compliant: NA

6.7 One-way operations

Compliant: NA

6.8 javax.xml.ws.WebServiceFeatures

6.9 enabled property

Compliant: NA

6.10 javax.xml.ws.soap.MTOMFeature

Compliant: NA

6.11 javax.xml.ws.RespectBindingFeature

Compliant: NA

7.1 Correctness of annotations

Compliant: NA

7.2 Handling incorrect annotations

Compliant: NA

7.3 Unsupported WebServiceFeatureAnnotation

Compliant: NA

javax.xml.ws.ServiceMode

Compliant: Yes

javax.xml.ws.WebFault

Compliant: Yes

javax.xml.ws.RequestWrapper

Compliant: Yes

javax.xml.ws.ResponseWrapper

Compliant: Yes

javax.xml.ws.WebServiceProvider

Compliant: Yes

7.4 WebServiceProvider and WebService

Compliant: Yes

javax.xml.ws.BindingType

Compliant: Partial

Note: Only the default binding method (SOAP1.1/HTTP) is supported by DAP.

javax.xml.ws.WebServiceRef

Compliant: Yes

javax.xml.ws.WebServiceRefs

Compliant: Yes

7.5 JSR-181 conformance

Compliant: Partial

Note: See JSR-181 compliance statement above.

javax.xml.ws.Action

Compliant: Partial

Note: Since the translation is not standardised, it is not possible to determine compliance.

javax.xml.ws.FaultAction

Compliant: Partial

Note: Since the translation is not standardised, it is not possible to determine compliance.

javax.xml.spi.WebServiceFeatureAnnotation

Compliant: Partial

Note: See the next 3 annotations for details.

javax.xml.ws.soap.Addressing

Compliant: Partial

Note: Since the translation is not standardised, it is not possible to determine compliance.

javax.xml.ws.soap.MTOM

Compliant: No

Note: MTOM encoding is not supported..

javax.xml.ws.RespectBinding

Compliant: Partial

Note: Only SOAP1.1/HTTP binding is supported, with no binary encodings.

8.1 Standard binding declarations

Compliant: NA

8.2 Binding language extensibility

Compliant: NA

8.3 Multiple binding files

Compliant: NA

9.1 Handler framework support

Compliant: NA

9.2 Logical handler support

Compliant: NA

9.3 Other handler support

9.4 Incompatible handlers

Compliant: NA

9.5 Incompatible handlers

Compliant: NA

9.6 Handler chain snapshot

Compliant: NA

9.7 HandlerChain annotation

Compliant: NA

9.8 Handler resolver for a HandlerChain annotation

Compliant: NA

9.9 Binding handler manipulation

Compliant: NA

9.10 Handler initialization

Compliant: NA

9.11 Handler destruction

Compliant: NA

9.12 Invoking close

Compliant: NA

9.13 Order of close invocations

Compliant: NA

9.14 Message context property scope

Compliant: NA

10.1 SOAP required roles

Compliant: Yes

10.2 SOAP required roles

Compliant: Yes

10.3 Default role visibility

Compliant: NA

10.4 Default role persistence

Compliant: NA

10.5 None role error

10.6 Incompatible handlers

Compliant: NA

10.7 Incompatible handlers

Compliant: NA

10.8 Logical handler access

Compliant: NA

10.9 SOAP 1.1 HTTP Binding Support

Compliant: Partial

Note: DAP does not support the use of mime attachments with the SOAP binding.

10.10 SOAP 1.2 HTTP Binding Support

Compliant: Partial

Note: DAP does not support the use of mime attachments with the SOAP binding.

**10.11 SOAP MTOM Support** 

Compliant: No

Note: DAP does not support MTOM.

10.12 Semantics of MTOM enabled

Compliant: Yes

Note: DAP does not support MTOM, however this indicates that MTOM support from the client is

optional.

10.13 MTOM support

Compliant: NA

10.14 SOAP bindings with MTOM disabled

Compliant: Yes

10.15 SOAP bindings with MTOM enabled

Compliant: Yes

10.16 MTOM on Other SOAP Bindings

Compliant: NA

10.17 One-way operations

Compliant: Yes

10.18 HTTP basic authentication support

Compliant: No

Note: DAP does not support HTTP basic authentication.

10.19 Authentication properties

Compliant: NA

10.20 URL rewriting support

Compliant: No

Note: DAP does not support URL rewriting for session management.

10.21 Cookie support

Compliant: No

Note: DAP does not support cookies for session management.

10.22 SSL session support

Compliant: No

Note: DAP does not support SSL for session management.

10.23 SOAP Addressing Support

Compliant: No

Note: DAP does not support WS-Addressing.

11.1 XML/HTTP Binding Support

Compliant: No

**Note:** DAP only supports SOAP 1.1/HTTP binding.

11.2 Incompatible handlers

Compliant: No

Note: DAP only supports SOAP 1.1/HTTP binding.

11.3 Incompatible handlers

Compliant: No

Note: DAP only supports SOAP 1.1/HTTP binding.

11.4 Logical handler access

Compliant: No

Note: DAP only supports SOAP 1.1/HTTP binding.

11.5 One-way operations

Compliant: No

Note: DAP only supports SOAP 1.1/HTTP binding.

11.6 HTTP basic authentication support

Compliant: No

Note: DAP only supports SOAP 1.1/HTTP binding.

11.7 Authentication properties

Note: DAP only supports SOAP 1.1/HTTP binding.

# 11.8 URL rewriting support

Compliant: No

Note: DAP only supports SOAP 1.1/HTTP binding.

# 11.9 Cookie support

Compliant: No

Note: DAP only supports SOAP 1.1/HTTP binding.

# 11.10 SSL session support

Compliant: No

Note: DAP only supports SOAP 1.1/HTTP binding.

# **WSDL Compliance**

# **Description**

This section demonstrates the compliance/ non-compliance of the WSDL 1.1 support in DAP to the Web Services Description Language (WSDL) 1.1.

# 2.1.2 Authoring Style

Compliant: Yes

#### 2.1.3 Language Extensibility and Binding

Compliant: No

Note: DAP will not support extensions.

#### 2.1.4 Documentation

Compliant: Yes

#### 2.2 Types

Compliant: Partial

Note: DAP will not support extensions to the type system. Only XSD will be supported.

#### 2.3 Messages

Compliant: Yes

# 2.3.1 Message Parts

Compliant: Yes

Note: The schema driven format is preferred.

# 2.4 Port Types

Compliant: Partial

Note: One-Way and Request-response are the only supported transmission primitives.

# 2.4.1 One-way Operation

Compliant: Yes

# 2.4.2 Request-response Operation

Compliant: Yes

# 2.4.3 Solicit-response Operation

Compliant: No

# 2.4.4 Notification Operation

Compliant: No

# 2.4.5 Names of Elements within an Operation

Compliant: Yes

# 2.4.6 Parameter Order within an Operation

Compliant: No

Note: RPC parameterOrder parameter is not used by DAP.

# 2.5 Bindings

Compliant: Yes

2.6 Ports

Compliant: Yes

# 2.7 Services

Compliant: Yes

# 3 SOAP Binding

Compliant: Yes

# 3.2 How the SOAP Binding Extends WSDL

Compliant: Partial

Note: soap:header and soap:headerfault are not supported.

# 3.3 soap:binding

Compliant: Yes

# 3.4 soap:operation

Compliant: Yes

# 3.5 soap:body

Compliant: Yes

# 3.6 soap:fault

Compliant: Yes

3.7 soap:header and soap:headerfault

Compliant: No

Note: soap:header and soap:headerfault are not supported.

3.8 soap:address

Compliant: Yes

4 HTTP GET & POST Binding

Compliant: No

Note: Only SOAP binding is supported.

**5 MIME Binding** 

Compliant: No

Note: Only SOAP binding is supported.

# **Glossary of Terms**

# **ACS**

Advanced Control Services configuration platform.

#### **API**

**Application Programming Interface** 

# Connection

Transport level link between two peers, providing for multiple sessions.

# Convergent

Also "convergent billing". Describes the scenario where post-paid and pre-paid calls are handed by the same service platform and the same billing system. Under strict converged billing, post-paid subscribers are essentially treated as "limited credit pre-paid".

#### **DAP**

Data Access Pack. An extension module for ACS which allows control plans to make asynchronous requests to external systems over various protocols including XML and LDAP.

#### HTML

HyperText Markup Language, a small application of SGML used on the World Wide Web.

It defines a very simple class of report-style documents, with section headings, paragraphs, lists, tables, and illustrations, with a few informational and presentational items, and some hypertext and multimedia.

# **HTTP**

Hypertext Transport Protocol is the standard protocol for the carriage of data around the Internet.

#### **SGML**

Standard Generalized Markup Language. The international standard for defining descriptions of the structure of different types of electronic document.

#### SOAP

Simple Object Access Protocol. An XML-based messaging protocol.

# SSL

Secure Sockets Layer protocol

#### URI

Uniform Resource Identifier.

# **URL**

Uniform Resource Locator. A standard way of specifying the location of an object, typically a web page, on the Internet.

# **WSDL**

Web Services Description Language.

# **XML**

eXtensible Markup Language. It is designed to improve the functionality of the Web by providing more flexible and adaptable information identification.

It is called extensible because it is not a fixed format like HTML. XML is a 'metalanguage' — a language for describing other languages—which lets you design your own customized markup languages for limitless different types of documents. XML can do this because it's written in SGML.

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