

# **SyncML Implementation Conformance Statement Proforma**

#### Version 1.0

#### Abstract

The SyncML Implementation Conformance Statement is designed to be used by vendors to show their level of conformance with SyncML specifications.

Note that if your product can perform as both a client and a server, you will need to fill out both sets of forms.



SyncML Initiative

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# **Table of Contents**

1	Intro	oduction	5
2	Prod	duct Information	е
	2.1	Device and Contact Information	6
	2.2	Content Formats Supported	
3	Serv	ver Conformance Tables	7
	3.1	Representation Common Use Elements	
	3.2	Representation Message container elements	
	3.3	Data description elements	
	3.4	Representation Protocol command elements	8
	3.5	Device Info	8
	3.6	Meta Info	9
	3.7	Protocol	9
	3.8	Authentication	10
	3.9	MIME header types	10
4	Clie	nt Conformance Tables	11
	4.1	Representation Common Use Elements	11
	4.2	Representation Message container elements	
	4.3	Data description elements	
	4.4	Representation Protocol command elements	12
	4.5	Device Info	12
	4.6	Meta Info	13
	4.7	Protocol	13
	4.8	Authentication	14
	4.9	MIME header types	14
5	Trar	nsport Conformance	15
	5.1	HTTP Transport	15
	5.2	OBEX Transport	
	5.3	WSP Transport	
6	Refe	arences	17



#### 1 Introduction

The purpose of this statement is to define a methodology for showing conformance with the SyncML Representation protocol [1], SyncML Sync Protocol [2] and appropriate transport. Vendors filling in this form will mark the items with either YES or NO, indicating whether the items are implemented or not. Mandatory items marked NO MUST have explanatory text.

NOTE: Server must be able to deal with with the two cases or packages 1 & 3 being sent seperately and combined.



#### 2 Product Information

#### 2.1 Device and Contact Information

Device Name & Version	Ericsson Client 5
Company	Sony Ericsson Mobile Communications AB
Contact Name	Carl Gustavsson
Contact Phone	+46 46 19 46 56
Contact Email	carl.gustavsson@ecs.ericsson.se
Transports supported	OBEX [] WSP [X] HTTP []
Product is	Client [X] Server []

#### 2.2 Content Formats Supported

NOTE: If a server supports a data type listed below, it must also support the associated content format.

Data Type	Content Format	Supported (Y/N)
Contact	vCard 2.1	Yes
	vCard 3.0 (optional)	
Calendar	vCalendar 1.0	Yes
	iCalendar 2.0 (optional)	
Memos	text/plain	
Tasks	vTodo 1.0	Yes
Email	message/rfc822	
	message/rfc2822	
	Message/rfc2045	



#### 3 Server Conformance Tables

NOTE: Server SHOULD be able to log the XML and WBXML documents sent between the server and a client.

#### 3.1 Representation Common Use Elements

Command	Required	Required of Server		ted in Server
	Sending	Receiving	Sending	Receiving
Archive	MAY	MUST		
Chal	MUST	MUST		
Cmd	MUST	MUST		
CmdID	MUST	MUST		
CmdRef	MUST	MUST		
Cred	MUST	MUST		
Final	MUST	MUST		
Lang	MAY	MAY		
LocName	MAY	MAY		
LocURI	MUST	MUST		
MsgID	MUST	MUST		
MsgRef	MUST	MUST		
NoResp	MAY	MUST		
NoResults	MAY	MAY		
RespURI	MAY	MUST		
SessionID*	MUST	MUST		
SftDel	MAY	MAY		
Source	MUST	MUST		
SourceRef	MUST	MUST		
Target	MUST	MUST		
TargetRef	MUST	MUST		
VerDTD	MUST	MUST		
VerProto	MUST	MUST		

<sup>\*</sup>The maximum length of a SessionID is 4 bytes. Note that a client having an 8 bit incrementing SessionID counter is enough for practical implementations.

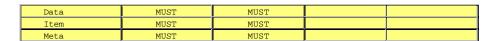
#### 3.2 Representation Message container elements

Command	Required of Server		Implement	ted in Server
	Sending	Receiving	Sending	Receiving
SyncML	MUST	MUST		
SyncHdr	MUST	MUST		
SyncBody	MUST	MUST		

#### 3.3 Data description elements

Command	Command Required of Server		Implemented in Server	
	Sending	Receiving	Sending	Receiving





# 3.4 Representation Protocol command elements

Command	Required	l of Server	Implemen	ted in Server
	Sending	Receiving	Sending	Receiving
Add	MUST	MUST		
Alert	MUST	MUST		
Atomic	MAY	MAY		
Copy	MAY	MUST		
Delete	MUST	MUST		
Exec	MAY	SHOULD		
Get*	MUST	MUST		
Map	MAY	MUST		
MapItem	MAY	MUST		
Put*	MUST	MUST		
Replace	MUST	MUST		
Result*	MUST	MUST		
Search	MAY	MAY		
Sequence	MAY	MUST		
Status	MUST	MUST		
Sync	MUST	MUST		

<sup>\*</sup>Minimum requirement for a SyncML device is to support Put, Get, and Result when exchanging device information.

#### 3.5 Device Info

Element Type	Required	of Server	Implement	ted in Server
	Sending	Receiving	Sending	Receiving
CTCap	SHOULD	MUST		
CTType	MUST	MUST		
DataStore	MUST	MUST		
DataType	MAY	MUST		
DevID	MUST	MUST		
DevInf	MUST	MUST		
DevTyp	MUST	MUST		
DisplayName	MAY	MAY		
DSMem	MAY	SHOULD		
Ext	MAY	MAY		
FwV	MAY	SHOULD		
HwV	MAY	SHOULD		
Man	MAY	SHOULD		
MaxGUIDSize	MUST NOT	MUST		
MaxID	MAY	SHOULD		
MaxMem	MAY	SHOULD		
Mod	MAY	MAY		
OEM	MAY	MAY		



ParamName	SHOULD	MUST	
PropName	SHOULD	MUST	
Rx	MAY	MUST	
Rx-Pref	MUST	MUST	
SharedMem	SHOULD	MAY	
Size	MAY	MUST	
SourceRef	MUST	MUST	
SwV	MAY	SHOULD	
SyncCap	MUST	MUST	
SyncType	MUST	MUST	
Tx	MAY	MUST	
Tx-Pref	MUST	MUST	
ValEnum	SHOULD	MUST	
VerCT	MUST	MUST	
VerDTD	MUST	MUST	
Xnam	MAY	MAY	
Xval	MAY	MAY	

#### 3.6 Meta Info

Element Type	Required	d of Server	Implement	ted in Server
	Sending	Receiving	Sending	Receiving
Anchor	MUST	MUST		
EMI	MAY	MAY		
Format	MUST	MUST		
FreeID	MAY	MUST		
FreeMem	MAY	MUST		
Last	MUST	MUST		
Mark	MAY	MAY		
MaxMsqSize	MAY	MUST		
Mem	MAY	MUST		
MetInf	MUST	MUST		
Next	MUST	MUST		
NextNonce	MUST	MUST		
SharedMem	MAY	MUST		
Size	MAY	MAY		
Type	MUST	MUST		
Version	MUST	MUST		

#### 3.7 Protocol

Element Type	Server Requirements	
	Required	Implemented
Support of 'two-way sync'	MUST	
Support of 'slow two-way sync'	MUST	
Support of 'one-way sync from client only'	MAY	
Support of 'refresh sync from client only'	MAY	



Support of 'one-way sync from server only'	MAY	
Support of 'refresh sync from server only'	MAY	
Support of 'sync alert'	MAY	
Support of multiple messages per package	MUST	
Support of combined package 1 and 3	MUST	

#### 3.8 Authentication

Authentication Type	Server Re	equirements
	Required	Implemented
Basic (name and password)	MUST	
MD5	MUST	

#### 3.9 MIME header types

MIME Header Type	Server Requirements	
	Required	Implemented
"application/vnd.syncml+xml"	MUST	
"application/vnd.syncml+wbxml"	MUST	



#### 4 Client Conformance Tables

#### 4.1 Representation Common Use Elements

Command	Required of Client		Implemen	ted in Client
	Sending	Receiving	Sending	Receiving
Archive	MAY	MAY	No	No
Chal	MAY	MUST	No	Yes
Cmd	MUST	MUST	Yes	Yes
CmdID	MUST	MUST	Yes	Yes
CmdRef	MUST	MUST	Yes	Yes
Cred	MUST	MUST	Yes	Yes
Final	MUST	MUST	Yes	Yes
Lang	MAY	MAY	No	No
LocName	MAY	MAY	Yes	No
LocURI	MUST	MUST	Yes	Yes
MsgID	MUST	MUST	Yes	Yes
MsgRef	MUST	MUST	Yes	Yes
NoResp	MAY	MUST	No	Yes
NoResults	MAY	MAY	No	No
RespURI	MAY	MUST	No	Yes
SessionID*	MUST	MUST	Yes	Yes
SftDel	MAY	MAY	No	No
Source	MUST	MUST	Yes	Yes
SourceRef	MUST	MUST	Yes	Yes
Target	MUST	MUST	Yes	Yes
TargetRef	MUST	MUST	Yes	Yes
VerDTD	MUST	MUST	Yes	Yes
VerProto	MUST	MUST	Yes	Yes

<sup>\*</sup>The maximum length of a SessionID is 4 bytes. Note that a client having an 8 bit incrementing SessionID counter is enough for practical implementations.

#### 4.2 Representation Message container elements

Command	Required of Client		Implemen	ted in Client
	Sending	Receiving	Sending	Receiving
SyncML	MUST	MUST	Yes	Yes
SyncHdr	MUST	MUST	Yes	Yes
SyncBody	MUST	MUST	Yes	Yes

#### 4.3 Data description elements

Command	Required of Client		Implemen	ted in Client
	Sending	Receiving	Sending	Receiving
Data	MUST	MUST	Yes	Yes
Item	MUST	MUST	Yes	Yes
Meta	MUST	MUST	Yes	Yes





# 4.4 Representation Protocol command elements

Command	Required of Client		Implemen	ted in Client
	Sending	Receiving	Sending	Receiving
Add	SHOULD	MUST	No	Yes
Alert	MUST	MUST	Yes	Yes
Atomic	MAY	MAY	No	No
Copy	MAY	MAY	No	No
Delete	MUST	MUST	Yes	Yes
Exec	MAY	MAY	No	No
Get*	SHOULD	MUST	No	Yes
Map	MUST	MAY	Yes	No
MapItem	MUST	MAY	Yes	No
Put*	MUST	MUST	Yes	Yes
Replace	MUST	MUST	Yes	Yes
Result*	MUST	SHOULD	Yes	No
Search	MAY	MAY	No	No
Sequence	MAY	MAY	No	No
Status	MUST	MUST	Yes	Yes
Sync	MUST	MUST	Yes	Yes

<sup>\*</sup>Minimum requirement for a SyncML device is to support Put, Get, and Result when exchanging device information.

#### 4.5 Device Info

Element Type	Required of Client		Implemen	ted in Client
	Sending	Receiving	Sending	Receiving
CTCap	MUST	SHOULD	Yes	Yes
CTType	MUST	MUST	Yes	Yes
DataStore	MUST	MUST	Yes	Yes
DataType	MAY	MAY	No	No
DevId	MUST	MUST	Yes	Yes
DevInf	MUST	MUST	Yes	Yes
DevTyp	MUST	MUST	Yes	Yes
DisplayName	MAY	MAY	No	No
DSMem	SHOULD	MAY	Yes	No
Ext	MAY	MAY	No	No
FwV	SHOULD	MAY	No	No
HwV	SHOULD	MAY	Yes	No
Man	SHOULD	MAY	Yes	No
MaxGUIDSize	MUST	MUST NOT	Yes	No
MaxID	SHOULD	MAY	Yes	No
MaxMem	SHOULD	MAY	No	No
Mod	MAY	MAY	No	No
OEM	MAY	MAY	No	No
ParamName	SHOULD	SHOULD	Yes	No
PropName	MUST	SHOULD	Yes	Yes
Rx	MAY	MUST	Yes	Yes



Rx-Pref	MUST	MUST	Yes	Yes
SharedMem	SHOULD	MAY	No	Yes
Size	MAY	MAY	No	No
SourceRef	MUST	MUST	Yes	Yes
SwV	SHOULD	MAY	Yes	No
SyncCap	MUST	MUST	Yes	Yes
SyncType	MUST	MUST	Yes	Yes
Tx	MAY	MUST	No	Yes
Tx-Pref	MUST	MUST	Yes	Yes
ValEnum	MUST	SHOULD	Yes	Yes
VerCT	MUST	MUST	Yes	Yes
VerDTD	MUST	MUST	Yes	Yes
Xnam	MAY	MAY	No	No
Xval	MAY	MAY	No	No

#### 4.6 Meta Info

Element Type	Required of Client		Implemen	ted in Client
	Sending	Receiving	Sending	Receiving
Anchor	MUST	MUST	Yes	Yes
EMI	MAY	MAY	No	No
Format	MUST	MUST	Yes	Yes
FreeID	SHOULD	MAY	Yes	No
FreeMem	SHOULD	MAY	Yes	No
Last	MUST	MUST	Yes	Yes
Mark	MAY	MAY	No	No
MaxMsgSize	MAY	MUST	Yes	Yes
Mem	SHOULD	MAY	No	No
MetInf	MUST	MUST	Yes	Yes
Next	MUST	MUST	Yes	Yes
NextNonce	MAY	MUST	No	Yes
SharedMem	SHOULD	MAY	No	No
Size	MAY	MAY	No	No
Type	MUST	MUST	Yes	Yes
Version	MAY	MAY	No	No

#### 4.7 Protocol

Element Type	Client Re	quirements
	Required	Implemented
Support of 'two-way sync'	MUST	Yes
Support of 'slow two-way sync'	MUST	Yes
Support of 'one-way sync from client only'	MAY	No
Support of 'refresh sync from client only'	MAY	No
Support of 'one-way sync from server only'	MAY	No
Support of 'refresh sync from server only'	MAY	No
Support of 'sync alert'	MAY	No



Support of multiple messages per package	MUST	Yes
Support of combined package 1 and 3	MAY	No

### 4.8 Authentication

Note that authentication is only required for SyncHdr, optional for datastore.

Authentication Type	Client Requirements	
	Required	Implemented
Basic (name and password)	MUST	Yes
MD5	MUST	Yes

#### 4.9 MIME header types

NOTE: the client MUST support one of the two MIME header types.

MIME Header Type	Client Re	Client Requirements	
	Required	Implemented	
"application/vnd.syncml+xml"	MUST if no wbxml	No	
"application/vnd.syncml+wbxml"	MUST if no xml	Yes	





# 5 Transport Conformance

#### **5.1 HTTP Transport**

Vendors should fill this section out ONLY if their product uses the HTTP Transport. The specification for HTTP Transport is fully described in 0.

NOTE that the tables only indicate the required data.

	Method	Requirements	
		Required	Implemented
Ī	POST	MUST	

General Headers	Requ	Requirements	
	Required	Implemented	
Cache-Control: no-store, private	MUST		
Transfer-Encoding: chunked	MUST		

Request Headers	Requi	Requirements	
	Required	Implemented	
Accept	MUST		
Accept-Charset	MUST		
Authorization	MUST		
Proxy-Authorization	MUST if a proxy client		
User-Agent	MUST		

Response Headers	Requi	Requirements	
	Required	Implemented	
Authentication-Info	MUST		
Proxy-Authenticate	MUST if proxy client		
WWW-Authenticate	MUST		

#### **5.2 OBEX Transport**

Vendors should fill this section out ONLY if their product uses the OBEX Transport. The specification for OBEX Transport is fully described in 0. Note that these definitions of client and server are the OBEX definition, not the SyncML definition.

NOTE that the tables only indicate the required data.

Method		OBEX Serve	OBEX Server Requirements	
		Required	Implemented	
GET		MUST		



PUT	MUST	
CONNECT	MUST	
DISCONNECT	MUST	
ABORT	MUST	

Method	OBEX Client Requirements	
	Required	Implemented
GET	MUST	
PUT	MUST	
CONNECT	MUST	
DISCONNECT	MUST	

# 5.3 WSP Transport

Vendors should fill this section out ONLY if their product uses the WSP Transport. The specification for WSP Transport is fully described in 0.

NOTE that the tables only indicate the required data.

Method		Requirements	
		Required	Implemented
POST		MUST	Yes



#### 6 References

- [1] SyncML Representation Protocol Specification
- [2] SyncML Sync Protocol
- [3] Meta Information Specification and DTD
- [4] Device Information Specification and DTD
- [5] SyncML HTTP Binding
- [6] SyncML OBEX Binding
- [7] SyncML WSP Binding