

SyncML Implementation Conformance Statement Proforma SyncML DataSync V1.0.1

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 you are submitting both a client and a server, you will need to fill out two separate forms.



2 of 18 Pages Version 2.0 2002-10-22

SyncML Initiative

The following companies are Sponsors of the SyncML Initiative:

Ericsson IBM Lotus Matsushita Communication Industrial Co., Ltd. Motorola Nokia Openwave Palm, Inc. Psion Starfish Software Symbian

Revision History

Revision	Date	Comments	
2.0	2002-10-22	Signed off for integration into OMA.	



SyncML DataSync (V1.0.1)

3 of 18 Pages Version 2.0 2002-10-22

Copyright Notice

Copyright (c) Ericsson, IBM, Lotus, Matsushita Communication Industrial Co., LTD, Motorola, Nokia, Openwave, Palm, Inc., Psion, Starfish Software, Symbian (2000-2002).

All Rights Reserved.

Implementation of all or part of any Specification may require licenses under third party intellectual property rights, including without limitation, patent rights (such a third party may or may not be a Supporter). The Sponsors of the Specification are not responsible and shall not be held responsible in any manner for identifying or failing to identify any or all such third party intellectual property rights.

THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN ARE PROVIDED ON AN "AS IS" BASIS WITHOUT WARRANTY OF ANY KIND AND ERICSSON, IBM, LOTUS, MATSUSHITA COMMUNICATION INDUSTRIAL CO. LTD, MOTOROLA, NOKIA, PALM INC., PSION, STARFISH SOFTWARE AND ALL OTHER SYNCML SPONSORS DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION HEREIN WILL NOT INFRINGE ANY RIGHTS OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL ERICSSON, IBM, LOTUS, MATSUSHITA COMMUNICATION INDUSTRIAL CO., LTD, MOTOROLA, NOKIA, PALM INC., PSION, STARFISH SOFTWARE OR ANY OTHER SYNCML SPONSOR BE LIABLE TO ANY PARTY FOR ANY LOSS OF PROFITS, LOSS OF BUSINESS, LOSS OF USE OF DATA, INTERRUPTION OF BUSINESS, OR FOR DIRECT, INDIRECT, SPECIAL OR EXEMPLARY, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES OF ANY KIND IN CONNECTION WITH THIS DOCUMENT OR THE INFORMATION CONTAINED HEREIN, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH LOSS OR DAMAGE.

The above notice and this paragraph must be included on all copies of this document that are made.



4 of 18 Pages Version 2.0 2002-10-22

Table of Contents

Introd	duction5
Produ	uct Information6
2.1	Device and Contact Information
2.2	Content Formats Supported
Serve	er Conformance Tables7
3.1	Representation Common Use Elements
3.2	Representation Message container elements7
3.3	Data description elements
3.4	Representation Protocol command elements
3.5	Device Info
3.6	Meta Info9
3.7	Protocol10
3.8	Authentication
3.9	MIME header types10
Clien	t Conformance Tables11
4.1	Representation Common Use Elements
4.2	Representation Message container elements
4.3	Data description elements
4.4	Representation Protocol command elements
4.5	Device Info12
4.6	Meta Info13
4.7	Protocol14
4.8	Authentication
4.9	MIME header types14
Trans	sport Conformance15
5.1	HTTP Transport15
5.2	OBEX Transport16
5.3	WSP Transport16
Addit	ional Information17
Refer	ences
	Produ 2.1 2.2 Serve 3.1 3.2 3.3 3.4 3.5 3.6 3.7 3.8 3.9 Clien 4.1 4.2 4.3 4.4 4.5 4.6 4.7 4.8 4.9 Trans 5.1 5.2 5.3 Addit



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 the two cases of packages 1 & 3 being sent separately and combined.

Please use section 6 to provide any additional information with regards to your Implementation Conformance Statement. Please do not annotate the SCR items in the following sections.

2 Product Information

2.1 Device and Contact Information

Device Name & Version:	S830C
Company:	BenQ
Contact Name:	Charles Chang
Contact Phone:	+886-3-611-8800 ext.7615
Contact Email:	CharlesChang@BenQ.com
Product is:	CLIENT[X] SERVER[]
Transports supported:	HTTP[X] WSP[] OBEX[]
OBEX support:	IrDA[] Bluetooth[]

Note s:

- The contents of the [Device Name & Version] field will appear in the List of compliant products on the SyncML web page.
- OBEX support for RS232 and USB is not defined scoped out within the SyncML bindings specifications. Devices cannot claim these transports until the specifications have been updated.

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	Y
	vCard 3.0 (optional)	Ν
Calendar	vCalendar 1.0	Y
	iCalendar 2.0 (optional)	Ν
Memos	text/plain	Ν
Tasks	vTodo 1.0	Ν
Email	message/rfc822	Ν
	message/rfc2822	Ν
	message/rfc2045	Ν
Other (Please specify any other sup ported data types)		N



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

This section contains the ICS proforma for the Static Conformance Requirements for the Representation Common Use Elements.

Command	Required	d of Server	Implemen	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		

*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

This section contains the ICS Proforma for the Static Conformance Requirements for the Message Container elements.

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



8 of 18 Pages Version 2.0

2002-10-22

3.3 Data description elements

This section contains the ICS Proforma for the Static Conformance Requirements for the Data Description elements.

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

3.4 Representation Protocol command elements

This section contains the ICS Proforma for the Static Conformance Requirements for the Protocol Command elements.

Command	Required	d of Server	Implement	ted in Server
	Sending	Receiving	Sending	Receiving
Add	MUST	MUST		
Alert	MUST	MUST		
Atomic	MAY	MAY		
Сору	MAY	MUST		
Delete	MUST	MUST		
Exec	MAY	SHOULD		
Get*	MUST	MUST		
Мар	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		

*Minimum requirement for a SyncML device is to support Put, Get, and Result when exchanging device information.

3.5 Device Info

This section contains the ICS Proforma for the Static Conformance Requirements for SyncML Device Information.

Element Type	Required of Server		Implemen	ted in Server
	Sending	Receiving	Sending	Receiving
CTCap	SHOULD	MUST		
СТТуре	MUST	MUST		
DataStore	MUST	MUST		
DataType	MAY	MUST		
DevID	MUST	MUST		
DevInf	MUST	MUST		
DevTyp	MUST	MUST		
DisplayName	MAY	МАҮ		
DSMem	MAY	SHOULD		

SyncML Implementation Conformance Statement

SyncML

SyncML DataSync (V1.0.1)

Version 2.0 2002-10-22

9 of 18 Pages

Ext	MAY	MAY	_	
FwV	MAY	SHOULD	_	
HwV	MAY	SHOULD		
Man	МАҮ	SHOULD		
MaxGUIDSize	MUST NOT	MUST		
MaxID	MAY	SHOULD		
MaxMem	МАҮ	SHOULD		
Mod	MAY	MAY		
OEM	MAY	MAY		
ParamName	SHOULD	MUST		
PropName	SHOULD	MUST	_	
Rx	MAY	MUST	_	
Rx-Pref	MUST	MUST		
SharedMem	SHOULD	MAY		
Size	МАҮ	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

This section contains the ICS Proforma for the Static Conformance Requirements for SyncML Meta Information.

Element Type	Required	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		
MaxMsgSize	MAY	MUST		
Mem	MAY	MUST		
MetInf	MUST	MUST		
Next	MUST	MUST		
NextNonce	MUST	MUST		
SharedMem	MAY	MUST		
Size	MAY	MAY		
Туре	MUST	MUST		
Version	MUST	MUST		



3.7 Protocol

This section contains the ICS Proforma for the Static Conformance Requirements for the Sync Protocol.

Element Type	Server Re	quirements
	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

This section contains the ICS Proforma for the Static Conformance Requirements for SyncML Authentication.

Authentication Type	Server Requirements	
	Required Implemente	
Basic (name and password)	MUST	
MD5	MUST	

3.9 MIME header types

This section contains the ICS Proforma for the Static Conformance Requirements for SyncML MIME Media 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

This section contains the ICS proforma for the Static Conformance Requirements for the Representation Common Use Elements.

Command	Required of Client		Implemented 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

*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

This section contains the ICS Proforma for the Static Conformance Requirements for the 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



2002-10-22

4.3 Data description elements

This section contains the ICS Proforma for the Static Conformance Requirements for the 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

This section contains the ICS Proforma for the Static Conformance Requirements for the 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
Сору	MAY	MAY	NO	NO
Delete	MUST	MUST	YES	YES
Exec	MAY	MAY	NO	NO
Get*	SHOULD	MUST	YES	YES
Мар	MUST	MAY	YES	NO
MapItem	MUST	MAY	YES	NO
Put*	MUST	MUST	YES	YES
Replace	MUST	MUST	YES	YES
Result*	MUST	SHOULD	YES	YES
Search	MAY	MAY	NO	NO
Sequence	MAY	MAY	NO	NO
Status	MUST	MUST	YES	YES
Sync	MUST	MUST	YES	YES

*Minimum requirement for a SyncML device is to support Put, Get, and Result when exchanging device information.

4.5 Device Info

This section contains the ICS Proforma for the Static Conformance Requirements for SyncML Device Information.

Element Type	Required of Client		Implemen	ted in Client
	Sending	Receiving	Sending	Receiving
CTCap	MUST	SHOULD	YES	NO
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	NO	NO

SyncML Implementation Conformance Statement

SyncML DataSync (V1.0.1)

Version 2.0

420 V30 4-032 State			1010101121	
SyncM∟				2002-10-2
Ext	МАҮ	МАҮ	NO	NO
FwV	SHOULD	MAY	YES	NO
HwV	SHOULD	MAY	YES	NO
Man	SHOULD	MAY	YES	NO
MaxGUIDSize	MUST	MUST NOT	YES	NO
MaxID	SHOULD	MAY	NO	NO
MaxMem	SHOULD	MAY	NO	NO
Mod	MAY	MAY	YES	NO
OEM	MAY	MAY	NO	NO
ParamName	SHOULD	SHOULD	YES	NO
PropName	MUST	SHOULD	YES	NO
Rx	МАҮ	MUST	NO	YES
Rx-Pref	MUST	MUST	YES	YES
SharedMem	SHOULD	MAY	NO	NO
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	NO
VerCT	MUST	MUST	YES	YES
VerDTD	MUST	MUST	YES	YES
Xnam	MAY	MAY	NO	NO

4.6 Meta Info

Xval

This section contains the ICS Proforma for the Static Conformance Requirements for SyncML Meta Information.

MAY

NO

NO

MAY

Element Type	Element Type Required of C		Implement	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	NO	NO
FreeMem	SHOULD	MAY	NO	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
Туре	MUST	MUST	YES	YES
Version	MAY	MAY	NO	NO



4.7 Protocol

This section contains the ICS Proforma for the Static Conformance Requirements for the Sync Protocol.

Element Type	Client Requirements	
	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'	МАҮ	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	МАҮ	NO

4.8 Authentication

This section contains the ICS Proforma for the Static Conformance Requirements for SyncML 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

This section contains the ICS Proforma for the Static Conformance Requirements for SyncML MIME Media Types.

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

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



5 Transport Conformance

5.1 HTTP Transport

Vendors should fill this section out ONLY if their product uses the HTTP Transport.

NOTE that the tables only indicate the required data.

	Method	Requirements	
		Required	Implemented
P	OST	MUST	YES

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

Request Headers	Requ	Requirements	
	Required	Implemented	
Accept	MUST	YES	
Accept-Charset	MUST	YES	
Authorization	MUST	YES	
Proxy-Authorization	MUST if a proxy client	NO	
User-Agent	MUST	YES	

Response Headers	Requirements	
	Required	Implemented
Authentication-Info	MUST	YES
Proxy-Authenticate	MUST if proxy client	NO
WWW-Authenticate	MUST	YES



5.2 OBEX Transport

Vendors should fill this section out ONLY if their product uses the OBEX Transport

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.

NOTE that the tables only indicate the required data.

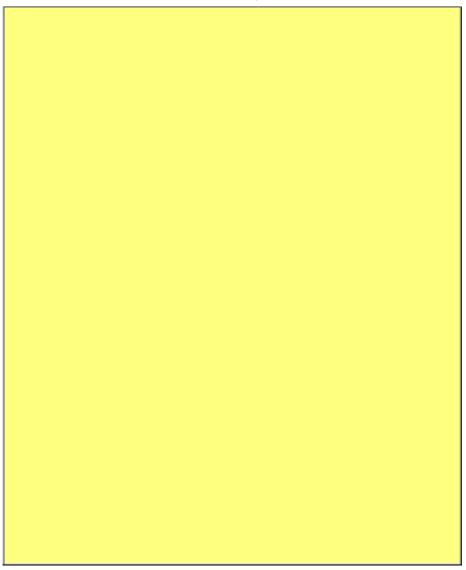
Method	Requirements	
	Required	Implemented
POST	MUST	



17 of 18 Pages Version 2.0 2002-10-22

6 Additional Information

Please use this section to provide any additional information with regards to your Implementation Conformance Statement. Please do not annotate the previous sections.





7 References

- [1] SyncML Representation Protocol, version 1.0.1
- [2] SyncML Sync Protocol, version 1.0.1
- [3] SyncML Meta-Information DTD, version 1.0.1
- [4] SyncML Device Information DTD, version 1.0.1
- [5] <u>SyncML HTTP Binding, version 1.0.1</u>
- [6] SyncML OBEX Binding, version 1.0.1
- [7] SyncML WSP Binding, version 1.0.1