



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.



SyncML Initiative

The following companies are Sponsors of the SyncML Initiative:

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

Revision History

Revision	Date	Comments
1.0	2001-11-02	Finalized for release.
1.1	2002-06-11	Updated to match format of later test programs



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.



Table of Contents

1	Introduction	5
2	Product Information	6
	2.1 Device and Contact Information	6
	2.2 Content Formats Supported	6
3	Server Conformance Tables	7
	3.1 Representation Common Use Elements	7
	3.2 Representation Message container elements	7
	3.3 Data description elements	8
	3.4 Representation Protocol command elements	8
	3.5 Device Info	8
	3.6 Meta Info	9
	3.7 Protocol	10
	3.8 Authentication	10
	3.9 MIME header types	10
4	Client Conformance Tables	11
	4.1 Representation Common Use Elements	11
	4.2 Representation Message container elements	11
	4.3 Data description elements	12
	4.4 Representation Protocol command elements	12
	4.5 Device Info	12
	4.6 Meta Info	13
	4.7 Protocol	14
	4.8 Authentication	14
	4.9 MIME header types	14
5	Transport Conformance	15
	5.1 HTTP Transport	15
	5.2 OBEX Transport	16
	5.3 WSP Transport	16
6	Additional Information	17
7	References	18



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:	Nexthaus SyncJe for Outlook, V1.0
Company:	Nexthaus Inc
Contact Name:	Dwain Stallings
Contact Phone:	(919) 862-8100
Contact Email:	info@nexthaus.com
Product is:	CLIENT[<input checked="" type="checkbox"/>] SERVER[<input type="checkbox"/>]
Transports supported:	HTTP[<input checked="" type="checkbox"/>] WSP[<input type="checkbox"/>] OBEX[<input type="checkbox"/>]
OBEX support:	IrDA[<input type="checkbox"/>] Bluetooth[<input type="checkbox"/>] RS232[<input type="checkbox"/>] USB[<input type="checkbox"/>]

Note: The contents of the [Device Name & Version] field will appear in the List of compliant products on the SyncML web page.

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)	Y
Calendar	vCalendar 1.0	Y
	iCalendar 2.0 (optional)	Y
Memos	text/plain	
Tasks	vTodo 1.0	Y
Email	message/rfc822	
	message/rfc2822	
	message/rfc2045	
Other (Please specify any other supported data types)		



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 of Server		Implemented 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		Implemented in Server	
	Sending	Receiving	Sending	Receiving
SyncML	MUST	MUST		
SyncHdr	MUST	MUST		
SyncBody	MUST	MUST		



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		Implemented 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 of Server		Implemented 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		

*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		Implemented 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

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

Element Type	Required of Server		Implemented 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		
Type	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 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

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

Authentication Type	Server Requirements	
	Required	Implemented
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	N	Y
Chal	MAY	MUST	N	Y
Cmd	MUST	MUST	Y	Y
CmdID	MUST	MUST	Y	Y
CmdRef	MUST	MUST	Y	Y
Cred	MUST	MUST	Y	Y
Final	MUST	MUST	Y	Y
Lang	MAY	MAY	N	Y
LocName	MAY	MAY	Y	Y
LocURI	MUST	MUST	Y	Y
MsgID	MUST	MUST	Y	Y
MsgRef	MUST	MUST	Y	Y
NoResp	MAY	MUST	N	Y
NoResults	MAY	MAY	N	N
RespURI	MAY	MUST	N	Y
SessionID*	MUST	MUST	Y	Y
SftDel	MAY	MAY	N	Y
Source	MUST	MUST	Y	Y
SourceRef	MUST	MUST	Y	Y
Target	MUST	MUST	Y	Y
TargetRef	MUST	MUST	Y	Y
VerDTD	MUST	MUST	Y	Y
VerProto	MUST	MUST	Y	Y

*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		Implemented in Client	
	Sending	Receiving	Sending	Receiving
SyncML	MUST	MUST	Y	Y
SyncHdr	MUST	MUST	Y	Y
SyncBody	MUST	MUST	Y	Y



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		Implemented in Client	
	Sending	Receiving	Sending	Receiving
Data	MUST	MUST	Y	Y
Item	MUST	MUST	Y	Y
Meta	MUST	MUST	Y	Y

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		Implemented in Client	
	Sending	Receiving	Sending	Receiving
Add	SHOULD	MUST	N	Y
Alert	MUST	MUST	Y	Y
Atomic	MAY	MAY	N	N
Copy	MAY	MAY	N	N
Delete	MUST	MUST	Y	Y
Exec	MAY	MAY	N	N
Get*	SHOULD	MUST	Y	Y
Map	MUST	MAY	Y	N
MapItem	MUST	MAY	Y	N
Put*	MUST	MUST	Y	Y
Replace	MUST	MUST	Y	Y
Result*	MUST	SHOULD	Y	Y
Search	MAY	MAY	N	N
Sequence	MAY	MAY	N	N
Status	MUST	MUST	Y	Y
Sync	MUST	MUST	Y	Y

*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		Implemented in Client	
	Sending	Receiving	Sending	Receiving
CTCap	MUST	SHOULD	Y	Y
CTType	MUST	MUST	Y	Y
DataStore	MUST	MUST	Y	Y
DataType	MAY	MAY	N	N
DevId	MUST	MUST	Y	Y
DevInf	MUST	MUST	Y	Y
DevTyp	MUST	MUST	Y	Y
DisplayName	MAY	MAY	Y	Y
DSMem	SHOULD	MAY	Y	Y



Ext	MAY	MAY	Y	Y
FwV	SHOULD	MAY	Y	Y
HwV	SHOULD	MAY	Y	Y
Man	SHOULD	MAY	Y	Y
MaxGUIDSize	MUST	MUST NOT	Y	N
MaxID	SHOULD	MAY	N	N
MaxMem	SHOULD	MAY	N	N
Mod	MAY	MAY	Y	Y
OEM	MAY	MAY	Y	Y
ParamName	SHOULD	SHOULD	Y	Y
PropName	MUST	SHOULD	Y	Y
Rx	MAY	MUST	Y	Y
Rx-Pref	MUST	MUST	Y	Y
SharedMem	SHOULD	MAY	N	N
Size	MAY	MAY	N	N
SourceRef	MUST	MUST	Y	Y
SwV	SHOULD	MAY	Y	Y
SyncCap	MUST	MUST	Y	Y
SyncType	MUST	MUST	Y	Y
Tx	MAY	MUST	Y	Y
Tx-Pref	MUST	MUST	Y	Y
ValEnum	MUST	SHOULD	Y	Y
VerCT	MUST	MUST	Y	Y
VerDTD	MUST	MUST	Y	Y
Xnam	MAY	MAY	Y	Y
Xval	MAY	MAY	Y	Y

4.6 Meta Info

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

Element Type	Required of Client		Implemented in Client	
	Sending	Receiving	Sending	Receiving
Anchor	MUST	MUST	Y	Y
EMI	MAY	MAY	N	N
Format	MUST	MUST	Y	Y
FreeID	SHOULD	MAY	N	N
FreeMem	SHOULD	MAY	N	N
Last	MUST	MUST	Y	Y
Mark	MAY	MAY	N	Y
MaxMsgSize	MAY	MUST	Y	Y
Mem	SHOULD	MAY	N	N
MetInf	MUST	MUST	Y	Y
Next	MUST	MUST	Y	Y
NextNonce	MAY	MUST	Y	Y
SharedMem	SHOULD	MAY	N	N
Size	MAY	MAY	N	N
Type	MUST	MUST	Y	Y
Version	MAY	MAY	N	N



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

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	Y
MD5	MUST	Y

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 Requirements	
	Required	Implemented
"application/vnd.syncml+xml"	MUST if no wbxml	Y
"application/vnd.syncml+wbxml"	MUST if no xml	Y



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
POST	MUST	Y

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

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

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



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 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	



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.

A large, empty rectangular area with a yellow background, intended for providing additional information related to the implementation conformance statement.



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] [SyncML HTTP Binding, version 1.0.1](#)
- [6] [SyncML OBEX Binding, version 1.0.1](#)
- [7] [SyncML WSP Binding, version 1.0.1](#)