SyncML Implementation Conformance Statement Proforma

Version 0.87

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.

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SyncML Initiative

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Revision History

Revision	Date	Comments
0.1	2000-11-17	1st pass
0.2	2000-12-14	Incorporate initial comments – such as adding in Protocol SCR, Authentication, and Transport section.
0.3	2001-01-15	Incorporated transport conformance tables.
0.4	2001-02-20	Corrected MIME type.
0.5	2001-03-08	Updated SCR tables to match errata. Updated Copyright.
0.6	2001-05-10	Corrected MetaInf and DevInfo tables. Added WSP table.
0.7	2001-06-01	Updated tables to match version 1.0.1 specifications.
0.8	2001-06-20	Updated media format table.

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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.

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2 Product Information

2.1 Device and Contact Information

Device Name & Version	**TriSync Ver 2.0**
Company	**WebSync**
Contact Name	**YongSuk Choi**
Contact Phone	**+82-2-508-2136**
Contact Email	**wdragon@websync.co.kr**
Transports supported	OBEX [ ] WSP [ ] HTTP [**YES**]
Product is	Client [**YES**] Server [**YES**]

2.2 Content Formats Supported

NOTE: If a server supports a data type listed below, it must also support the associated content format.Note: A server MUST support these content formats only if they are supporting the data type.

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

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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 of Server		Implemented in Server	
	Sending	Receiving	Sending	Receiving
Archive	MAY	MUST		YES
Chal	MUST	MUST	YES	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		
LocName	MAY	MAY		YES
LocURI	MUST	MUST	YES	YES
MsgID	MUST	MUST	YES	YES
MsgRef	MUST	MUST	YES	YES
NoResp	MAY	MUST		YES
NoResults	MAY	MAY		
RespURI	MAY	MUST		YES
SessionID*	MUST	MUST	YES	YES
SftDel	MAY	MAY		
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 impleme ntations.

3.2 Representation Message container elements

Command	Required of Server		Implemented in Server	
	Sending	Receiving	Sending	Receiving
SyncML	MUST	MUST	YES	YES
SyncHdr	MUST	MUST	YES	YES
SyncBody	MUST	MUST	YES	YES

3.3 Data description elements

Command	Required of Server	Implemented in Server

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	Sending	Receiving	Sending	Receiving
Data	MUST	MUST	YES	YES
Item	MUST	MUST	YES	YES
Meta	MUST	MUST	YES	YES

3.4 Representation Protocol command elements

Command	Required of Server		Implemented in Server	
	Sending	Receiving	Sending	Receiving
Add	MUST	MUST	YES	YES
Alert	MUST	MUST	YES	YES
Atomic	MAY	MAY		
Copy	MAY	MUST		YES
Delete	MUST	MUST	YES	YES
Exec	MAY	SHOULD		
Get*	MUST	MUST	YES	YES
Map	MAY	MUST		YES
MapItem	MAY	MUST		YES
Put*	MUST	MUST	YES	YES
Replace	MUST	MUST	YES	YES
Result*	MUST	MUST	YES	YES
Search	MAY	MAY		
Sequence	MAY	MUST		YES
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.

3.5 Device Info

Element Type	Required of Server		Implemented in Server	
	Sending	Receiving	Sending	Receiving
CTCap	SHOULD	MUST		YES
CTType	MUST	MUST	YES	YES
DataStore	MUST	MUST	YES	YES
DataType	MAY	MUST		YES
DevID	MUST	MUST	YES	YES
DevInf	MUST	MUST	YES	YES
DevTyp	MUST	MUST	YES	YES
DisplayName	MAY	MAY		
DSMem	MAY	SHOULD		
Ext	MAY	MAY		
FwV	MAY	SHOULD		
HwV	MAY	SHOULD		
Man	MAY	SHOULD		
MaxGUIDSize	MUST NOT	MUST		YES
MaxID	MAY	SHOULD		

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

3.6 Meta Info

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

3.7 Protocol

Element Type	Server Requirements	
	Required	Implemented

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Support of 'two-way sync'	MUST	YES
Support of 'slow two-way sync'	MUST	YES
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	YES
Support of combined package 1 and 3	MUST	YES

3.8 Authentication

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

3.9 MIME header types

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

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4 Client Conformance Tables

4.1 Representation Common Use Elements

Command	Required of Client		Implemented in Client	
	Sending	Receiving	Sending	Receiving
Archive	MAY	MAY		
Chal	MAY	MUST		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		
LocName	MAY	MAY	YES	
LocURI	MUST	MUST	YES	YES
MsgID	MUST	MUST	YES	YES
MsgRef	MUST	MUST	YES	YES
NoResp	MAY	MUST		YES
NoResults	MAY	MAY		
RespURI	MAY	MUST		YES
SessionID*	MUST	MUST	YES	YES
SftDel	MAY	MAY		
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

Command	Required of Client		Implemented 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		Implemented in Client	
	Sending	Receiving	Sending	Receiving
Data	MUST	MUST	YES	YES
Item	MUST	MUST	YES	YES

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Meta	MUST	MUST	YES	YES

4.4 Representation Protocol command elements

Command	Required of Client		Implemented in Client	
	Sending	Receiving	Sending	Receiving
Add	SHOULD	MUST	YES	YES
Alert	MUST	MUST	YES	YES
Atomic	MAY	MAY		
Copy	MAY	MAY		
Delete	MUST	MUST	YES	YES
Exec	MAY	MAY		
Get*	SHOULD	MUST		YES
Map	MUST	MAY	YES	
MapItem	MUST	MAY	YES	
Put*	MUST	MUST	YES	YES
Replace	MUST	MUST	YES	YES
Result*	MUST	SHOULD	YES	
Search	MAY	MAY		
Sequence	MAY	MAY		
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

Element Type	Required of Client		Implemented in Client	
	Sending	Receiving	Sending	Receiving
CTCap	MUST	SHOULD	YES	
CTType	MUST	MUST	YES	YES
DataStore	MUST	MUST	YES	YES
DataType	MAY	MAY		
DevId	MUST	MUST	YES	YES
DevInf	MUST	MUST	YES	YES
DevTyp	MUST	MUST	YES	YES
DisplayName	MAY	MAY		
DSMem	SHOULD	MAY		
Ext	MAY	MAY		
FwV	SHOULD	MAY		
HwV	SHOULD	MAY		
Man	SHOULD	MAY		
MaxGUIDSize	MUST	MUST NOT	YES	
MaxID	SHOULD	MAY		
MaxMem	SHOULD	MAY		
Mod	MAY	MAY		
OEM	MAY	MAY		

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

4.6 Meta Info

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

4.7 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	

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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	YES
Support of combined package 1 and 3	MAY	

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

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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 00000.

NOTE that the tables only indicate the required data.

Method	Requirements	
	Required	Implemented
POST	MUST	YES

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

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

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

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 00000. 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

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	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 00000.

NOTE that the tables only indicate the required data.

Method	Requirements	
	Required	Implemented
POST	MUST	

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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

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