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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.



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Revision History

Revision	Date	Comments
1.0	2001-11-02	Finalized for release.



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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	Tactel Jazz Server 1.0
Comp any	Tactel AB
Contact Name	Jens Staaf
Contact Phone	+46-40-250699
Contact Email	Jens.Staaf@tactel.se
Transports supported	OBEX [] WSP [] HTTP [X]
Product is	Client [] Server [X]

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



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		Implement	ed in Server
	Sending	Receiving	Sending	Receiving
Archive	MAY	MUST	NO	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	NO	NO
LocName	MAY	MAY	YES	YES
LocURI	MUST	MUST	YES	YES
MsgID	MUST	MUST	YES	YES
MsgRef	MUST	MUST	YES	YES
NoResp	MAY	MUST	NO	YES
NoResults	MAY	MAY	NO	YES
RespURI	MAY	MUST	YES	YES
SessionID*	MUST	MUST	YES	YES
SftDel	MAY	MAY	NO	YES
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.

3.2 Representation Message container elements

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

3.3 Data description elements

Command	Required of Server		Implemented in Server	
	Sending	Sending Receiving		Receiving

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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	Implement	ted in Server
	Sending	Receiving	Sending	Receiving
Add	MUST	MUST	YES	YES
Alert	MUST	MUST	YES	YES
Atomic	MAY	MAY	NO	NO
Сору	МАҮ	MUST	NO	YES
Delete	MUST	MUST	YES	YES
Exec	МАҮ	SHOULD	NO	NO
Get*	MUST	MUST	YES	YES
Мар	МАҮ	MUST	YES	YES
MapItem	MAY	MUST	YES	YES
Put*	MUST	MUST	YES	YES
Replace	MUST	MUST	YES	YES
Result*	MUST	MUST	YES	YES
Search	MAY	MAY	NO	NO
Sequence	MAY	MUST	NO	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	Implemen	ted in Server
	Sending	Receiving	Sending	Receiving
CTCap	SHOULD	MUST	YES	YES
СТТуре	MUST	MUST	YES	YES
DataStore	MUST	MUST	YES	YES
DataType	MAY	MUST	YES	YES
DevID	MUST	MUST	YES	YES
DevInf	MUST	MUST	YES	YES
DevTyp	MUST	MUST	YES	YES
DisplayName	MAY	МАҮ	YES	YES
DSMem	MAY	SHOULD	NO	YES
Ext	MAY	MAY	NO	YES
FwV	MAY	SHOULD	YES	YES
HwV	MAY	SHOULD	YES	YES
Man	MAY	SHOULD	YES	YES
MaxGUIDSize	MUST NOT	MUST	NO	YES
MaxID	MAY	SHOULD	NO	YES
MaxMem	MAY	SHOULD	NO	YES
Mod	MAY	MAY	YES	YES
OEM	MAY	МАҮ	YES	YES

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ParamName	SHOULD	MUST	YES	YES
PropName	SHOULD	MUST	YES	YES
Rx	МАҮ	MUST	YES	YES
Rx-Pref	MUST	MUST	YES	YES
SharedMem	SHOULD	MAY	NO	YES
Size	MAY	MUST	YES	YES
SourceRef	MUST	MUST	YES	YES
SwV	MAY	SHOULD	YES	YES
SyncCap	MUST	MUST	YES	YES
SyncType	MUST	MUST	YES	YES
Tx	MAY	MUST	YES	YES
Tx-Pref	MUST	MUST	YES	YES
ValEnum	SHOULD	MUST	YES	YES
VerCT	MUST	MUST	YES	YES
VerDTD	MUST	MUST	YES	YES
Xnam	МАҮ	MAY	NO	YES
Xval	МАҮ	MAY	NO	YES

3.6 Meta Info

Element Type	Required of Server		Implemen	ted in Server
	Sending	Receiving	Sending	Receiving
Anchor	MUST	MUST	YES	YES
EMI	MAY	MAY	NO	NO
Format	MUST	MUST	YES	YES
FreeID	MAY	MUST	NO	YES
FreeMem	MAY	MUST	NO	YES
Last	MUST	MUST	YES	YES
Mark	MAY	MAY	NO	NO
MaxMsgSize	MAY	MUST	YES	YES
Mem	MAY	MUST	NO	YES
MetInf	MUST	MUST	YES	YES
Next	MUST	MUST	YES	YES
NextNonce	MUST	MUST	YES	YES
SharedMem	MAY	MUST	NO	YES
Size	MAY	МАҮ	NO	NO
Туре	MUST	MUST	YES	YES
Version	MUST	MUST	YES	YES

3.7 Protocol

Element Type	Server 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'	MAY	NO

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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	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



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		
Chal	MAY	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.

4.2 Representation Message container elements

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

4.3 Data description elements

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



4.4 Representation Protocol command elements

Command	Required	d of Client	Implemen	ted in Client
	Sending	Receiving	Sending	Receiving
Add	SHOULD	MUST		
Alert	MUST	MUST		
Atomic	МАҮ	MAY		
Сору	MAY	MAY		
Delete	MUST	MUST		
Exec	MAY	MAY		
Get*	SHOULD	MUST		
Map	MUST	МАҮ		
MapItem	MUST	MAY		
Put*	MUST	MUST		
Replace	MUST	MUST		
Result*	MUST	SHOULD		
Search	МАҮ	МАҮ		
Sequence	МАҮ	МАҮ		
Status	MUST	MUST		
Sync	MUST	MUST		

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

4.5 Device Info

Element Type	Required	d of Client	Implemented in Client	
	Sending	Receiving	Sending	Receiving
CTCap	MUST	SHOULD		
СТТуре	MUST	MUST		
DataStore	MUST	MUST		
DataType	MAY	MAY		
DevId	MUST	MUST		
DevInf	MUST	MUST		
DevTyp	MUST	MUST		
DisplayName	MAY	MAY		
DSMem	SHOULD	MAY		
Ext	MAY	MAY		
FwV	SHOULD	MAY		
HwV	SHOULD	MAY		
Man	SHOULD	MAY		
MaxGUIDSize	MUST	MUST NOT		
MaxID	SHOULD	MAY		
MaxMem	SHOULD	MAY		
Mod	MAY	MAY		
OEM	MAY	MAY		
ParamName	SHOULD	SHOULD		
PropName	MUST	SHOULD		
Rx	МАҮ	MUST		



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

Meta Info 4.6

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

4.7 Protocol

Element Type	Client Re	Client Requirements	
	Required	Implemented	
Support of 'two-way sync'	MUST		
Support of 'slow two-way sync'	MUST		
Support of 'one -way sync from client only'	МАҮ		
Support of 'refresh sync from client only'	МАҮ		
Support of 'one -way sync from server only'	МАҮ		
Support of 'refresh sync from server only'	МАҮ		
Support of 'sync alert'	МАҮ		



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Support of multiple messages per package	MUST	
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	
MD5	MUST	

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	
"application/vnd.syncml+wbxml"	MUST if no xml	



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
POST	MUST	YES

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

Request Headers	Request Headers Requi	
	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
AuthenticationInfo	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. 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 Server Requirements	
	Required	Implemented
GET	MUST	

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MUST MUST MUST

MUST

MUST

Method	OBEX Client	Requirements
	Required	Implemented
GET	MUST	
PUT	MUST	
CONNECT	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	



PUT

CONNECT

ABORT

DISCONNECT

DISCONNECT



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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