



# **OMA DS Provisioning**

Approved Version 2.0 – 19 Jul 2011

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**Open Mobile Alliance**  
OMA-TS-DS\_Provisioning-V2\_0-20110719-A

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# 1. Scope

This document specifies the OMA DS provisioning.

Please refer to [DSCONCEPTS] for further information on the OMA DS organization and history.

## 2. References

### 2.1 Normative References

- [DSCONCEPTS] “Data Synchronization Concepts and Definitions”, Open Mobile Alliance™, OMA-TS-DS\_Concepts-V2\_0,  
[URL:http://www.openmobilealliance.org](http://www.openmobilealliance.org)
- [RFC2119] “Keywords for use in RFCs to Indicate Requirement Levels”, S. Bradner, March 1997,  
[URL:http://www.ietf.org/rfc/rfc2119.txt](http://www.ietf.org/rfc/rfc2119.txt)

### 2.2 Informative References

None.

Please refer to [DSCONCEPTS] for the other Informative References.

## 3. Terminology and Conventions

### 3.1 Conventions

The key words “MUST”, “MUST NOT”, “REQUIRED”, “SHALL”, “SHALL NOT”, “SHOULD”, “SHOULD NOT”, “RECOMMENDED”, “MAY”, and “OPTIONAL” in this document are to be interpreted as described in [RFC2119].

All sections and appendixes, except “Scope” and “Introduction”, are normative, unless they are explicitly indicated to be informative.

Any reference to components of the Data Synchronization XML Schema or XML snippets is specified in this typeface.

### 3.2 Definitions

Please refer to the [DSCONCEPTS] document.

### 3.3 Abbreviations

Please refer to the [DSCONCEPTS] document.

## 4. Introduction

This specification document's objective is to describe the minimum set of information that must be sent to provision an OMA DS 2.0 client. There is no intent to describe how the client is provisioned. OMA DS 2.0 relies on dedicated provisioning enablers (e.g. OMA CP, OMA DM, etc.), that must provide, using their own provisioning information format, the set of information defined in this document. This set of information is designed to be technology agnostic and can be morphed into whatever format (e.g. w5) a provisioning enabler uses. Appendixes A and B present morphing examples for OMA CP 1.1 and OMA DM provisioning.

## 5. Technology agnostic provisioning document

This section defines the minimum set of information to be sent to provision OMA DS 2.0 client.



## Appendix A. W5 document for OMA CP

*(Note : This part is based n the OMA-TS-SyncML-W5AppChar-V1\_2-20060316-C\_draft.txt which was designed for OMA DS 1.2)*

### IDENTIFYING INFORMATION

#####

APPID: w5.

APPID type: OMNA.

Owner: OMA Data Synchronization Working Group.

Contact: OMA Data Synchrnonization Working Group <OMA-DS@MAIL.OPENMOBILEALLIANCE.ORG>.

Registration version: 1.

Registration timestamp: 2004-01-09.

Application description: Data Synchronization (DS).

Application reference:

OMA Data Synchronization 1.2 specifications,

URL:<http://www.openmobilealliance.org/tech/release.html>.

"SyncML Data Sync Protocol" specification,

"SyncML Server Alerted Notification" specification.

### WELL-KNOWN PARAMETERS

#####

Characteristic/name: APPLICATION/APPID.

Status: Required.

Occurs: 1/1.

Default value: None.

Used values: w5.

Interpretation: N/A.

-----

Characteristic/name: APPLICATION/NAME.

Status: Optional.

Occurs: 0/1.

Default value: None.

Used values: N/A.

Interpretation: User displayable name for synchronization server.

-----

Characteristic/name: APPLICATION/TO-PROXY.

Status: Required if use of Proxy supported.

Occurs: 0/\*.

Default value: None.

Used values: N/A.

Interpretation: N/A.

-----

Characteristic/name: APPLICATION/TO-NAPID.

Status: Required if direct use of Network Access Point supported.

Occurs: 0/\*.

Default value: None.

Used values: N/A.

Interpretation: N/A.

-----

Characteristic/name: APPLICATION/PROVIDER-ID.

Status: Optional.

Occurs: 0/1.

Default value: None.

Used values: Server Identifier specified in OMA Data Synchronization 1.2 specifications.

Interpretation: Specifies the server identifier for data synchronization server used in the server alerted sync.

-----

Characteristic/name: APPADDR/ADDR.

Status: Required.

Occurs: 1/1.

Default value: None.

Used values: Absolute URI.

Interpretation: Synchronization server address, which may differ based on the used transport binding. Also APPLICATION/ADDR can be used to specify the address, if the parameter APPADDR/ADDRTYPE is not used.

-----

Characteristic/name: APPADDR/ADDRTYPE.

Status: Required.

Occurs: 0/1.

Default value: None.

Used values: N/A.

Interpretation: N/A.

-----

Characteristic/name: PORT/PORTNBR.

Status: Required.

Occurs: 0/1.

Default value: None.

Used values: N/A.

Interpretation: N/A.

-----

Characteristic/name: APPAUTH/AAUTHLEVEL.

Status: Required.

Occurs: 0/1.

Default value: None.

Used values: "APPSRV", "CLIENT", "OBEX".

Interpretation:

When the value is omitted, the characteristic contains client credentials for HTTP or WSP authentication. The used values are described below.

-----

Characteristic/name: APPAUTH/AAUTHTYPE.

Status: Required.

Occurs: 0/1.

Default value: None.

Used values:

"HTTP-BASIC", "HTTP-DIGEST", "BASIC", "DIGEST", "X509", "SECUREID", "SAFWORD", "DIGIPASS".

Interpretation:

See descriptions below.

-----

Characteristic/name: APPAUTH/AAUTHNAME.

Status: Required.

Occurs: 0/1.

Default value: None.

Used values: N/A.

Interpretation: N/A.

-----

Characteristic/name: APPAUTH/AAUTHSECRET.

Status: Required.

Occurs: 0/1.

Default value: None.

Used values: N/A.

Interpretation: N/A.

-----

Characteristic/name: APPAUTH/AAUTHDATA.

Status: Required.

Occurs: 0/1.

Default value: None.

Used values:

        Nonce value.

Interpretation:

        Contains the nonce value used in the OMA Data Synchronization authentication.

-----

Characteristic/name: RESOURCE.

Status: Required.

Occurs: 1/\*.

Default value: None.

Used values: N/A.

Interpretation: List of databases.

-----

Characteristic/name: RESOURCE/AACCEPT.

Status: Required.

Occurs: 1/1.

Default value: None.

Used values: N/A.

Interpretation: Specifies the content type the database supports.

-----

Characteristic/name: RESOURCE/URI.

Status: Required.

Occurs: 1/1.

Default value: None.

Used values: N/A.

Interpretation: Specifies the server database URI.

-----

Characteristic/name: RESOURCE/NAME.

Status: Optional.

Occurs: 0/1.

Default value: None.

Used values: N/A.

Interpretation: Specifies the user displayable name for database.

-----

Characteristic/name: RESOURCE/AAUTHTYPE.

Status: Required if Database level authentication is supported.

Occurs: 0/1.

Default value: None.

Used values: "HTTP-BASIC", "HTTP-DIGEST", "BASIC", "DIGEST", "X509", "SECUREID", "SAFWORD", "DIGIPASS".

Interpretation: See below.

-----

Characteristic/name: RESOURCE/AAUTHNAME.

Status: Required if Database level authentication is supported.

Occurs: 0/1.

Default value: None.

Used values: N/A.

Interpretation: N/A.

-----

Characteristic/name: RESOURCE/AAUTHSECRET.

Status: Required if Database level authentication is supported.

Occurs: 0/1.

Default value: None.

Used values: N/A.

Interpretation: N/A.

-----

#### APPLICATION-SPECIFIC PARAMETERS

#####

Characteristic/name: RESOURCE/CLIURI.

Status: Optional.

Occurs: 0/1.

Default value: None.

Used values: N/A.

Interpretation: Specifies the client database URI.

-----

Characteristic/name: RESOURCE/SYNCTYPE.

Status: Optional.

Occurs: 0/1.

Default value: "2".

Used values: "1", "2", "3", "4", "5", "6".

Interpretation: Specifies the type of synchronization to perform. See below.

-----

#### PARAMETER VALUES

#####

Characteristic/name/parameter: RESOURCE/SYNCTYPE/1.

Status: Optional.

Interpretation: "Slow sync" done according to "SyncML Synchronization Protocol".

-----

Characteristic/name/parameter: RESOURCE/SYNCTYPE/2.

Status: Optional.

Interpretation: "Two-way sync" done according to "SyncML Synchronization Protocol".

-----

Characteristic/name/parameter: RESOURCE/SYNCTYPE/3.

Status: Optional.

Interpretation: "One-way sync from client only" done according to "SyncML Synchronization Protocol".

-----

Characteristic/name/parameter: RESOURCE/SYNCTYPE/4.

Status: Optional.

Interpretation: " Refresh sync from client only" done according to "SyncML Synchronization Protocol".

-----

Characteristic/name/parameter: RESOURCE/SYNCTYPE/5.

Status: Optional.

Interpretation: " One-way sync from server only" done according to "SyncML Synchronization Protocol".

-----

Characteristic/name/parameter: RESOURCE/SYNCTYPE/6.

Status: Optional.

Interpretation: "Refresh sync from server only" done according to "SyncML Synchronization Protocol".

-----

Characteristic/name/parameter: APPAUTH/AAUTHTYPE/APPSRV.

Status: Required.

Interpretation:

                  Credentials client uses to authenticate itself to the OMA DS Server at the DS protocol level.

-----

Characteristic/name/parameter: APPAUTH/AAUTHTYPE/CLIENT.

Status: Required.

Interpretation:

                  Credentials server uses to authenticate itself to the OMA DS Client at the DS protocol level.

-----

Characteristic/name/parameter: APPAUTH/AAUTHTYPE/OBEX.

Status: Optional.

Interpretation: Client credentials for OBEX authentication.

-----

Characteristic/name/parameter: APPAUTH/AAUTHTYPE/HTTP-BASIC.

Status: Optional.

Interpretation: HTTP basic authentication done according to RFC 2617.

-----

Characteristic/name/parameter: APPAUTH/AAUTHTYPE/HTTP-DIGEST.

Status: Optional.

Interpretation: HTTP digest authentication done according to RFC 2617.

-----

Characteristic/name/parameter: APPAUTH/AAUTHTYPE/BASIC.

Status: Required.

Interpretation: OMA DS 'syncml:auth-basic' authentication as specified in "SyncML Representation Protocol".

-----

Characteristic/name/parameter: APPAUTH/AAUTHTYPE/DIGEST.

Status: Required.

Interpretation: OMA DS 'syncml:auth-md5' authentication as specified in "SyncML Representation Protocol".

-----

Characteristic/name/parameter: APPAUTH/AAUTHTYPE/X509.

Status: Optional.

Interpretation: OMA DS 'syncml:auth-X509' authentication done according to "SyncML Representation Protocol".

-----

Characteristic/name/parameter: APPAUTH/AAUTHTYPE/SECURID.

Status: Optional.

Interpretation: OMA DS 'syncml:auth-securid' authentication done according to "SyncML Representation Protocol".

-----

Characteristic/name/parameter: APPAUTH/AAUTHTYPE/SAFEWORD.



Status: Optional.

Interpretation: OMA DS 'syncml:auth-safeword' authentication done according to "SyncML Representation Protocol".

-----

Characteristic/name/parameter: APPAUTH/AAUTHTYPE/DIGIPASS.

Status: Optional.

Interpretation: OMA DS 'syncml:auth-digipass' authentication done according to "SyncML Representation Protocol".

-----

Characteristic/name/parameter: RESOURCE/AAUTHTYPE/HTTP-BASIC.

Status: Optional.

Interpretation: HTTP basic authentication done according to RFC 2617.

-----

Characteristic/name/parameter: RESOURCE/AAUTHTYPE/HTTP-DIGEST.

Status: Optional.

Interpretation: HTTP digest authentication done according to RFC 2617.

-----

Characteristic/name/parameter: RESOURCE/AAUTHTYPE/BASIC.

Status: Optional.

Interpretation: OMA DS 'syncml:auth-basic' authentication as specified in "SyncML Representation Protocol".

-----

Characteristic/name/parameter: RESOURCE/AAUTHTYPE/DIGEST.

Status: Optional.

Interpretation: OMA DS 'syncml:auth-md5' authentication as specified in "SyncML Representation Protocol".

-----

Characteristic/name/parameter: RESOURCE/AAUTHTYPE/X509.

Status: Optional.

Interpretation: OMA DS 'syncml:auth-X509' authentication done according to "SyncML Representation Protocol".

-----

Characteristic/name/parameter: RESOURCE/AAUTHTYPE/SECURID.

Status: Optional.

Interpretation: OMA DS 'syncml:auth-securid' authentication done according to "SyncML Representation Protocol".

-----

Characteristic/name/parameter: RESOURCE/AAUTHTYPE/SAFEWORD.

Status: Optional.

Interpretation: OMA DS 'syncml:auth-safeword' authentication done according to "SyncML Representation Protocol".

-----

Characteristic/name/parameter: RESOURCE/AAUTHTYPE/DIGIPASS.

Status: Optional.

Interpretation: OMA DS 'syncml:auth-digipass' authentication done according to "SyncML Representation Protocol".

-----

EXAMPLE

#####

```
<characteristic type="APPLICATION">
  <parm name="APPID" value="w5"/>
  <parm name="NAME" value="Sync Server"/>
  <parm name="ADDR" value="http://www.syncserver.com:8080/sync"/>
  <parm name="TO-NAPID" value="INTERNET"/>
  <characteristic type="APPAUTH">
    <parm name="AAUTHTYPE" value="HTTP-DIGEST"/>
    <parm name="AAUTHNAME" value="name"/>
    <parm name="AAUTHSECRET" value="secret"/>
  </characteristic>
  <characteristic type="APPAUTH">
    <parm name="AAUTHLEVEL" value="APPSRV"/>
    <parm name="AAUTHTYPE" value="DIGEST"/>
    <parm name="AAUTHNAME" value="servername"/>
    <parm name="AAUTHSECRET" value="serversecret"/>
  </characteristic>
  <characteristic type="RESOURCE">
    <parm name="URI" value="./Contacts"/>
  </characteristic>
</characteristic>
```

```
<parm name="NAME" value="Contact DB"/>
<parm name="ACCEPT" value="text/x-vcard,text/vcard"/>
<parm name="AUTHTYPE" value="DIGEST"/>
<parm name="AUTHNAME" value="databasename"/>
<parm name="AUTHSECRET" value="databasesecret"/>
</characteristic>
<characteristic type="RESOURCE">
  <parm name="URI" value="./Calendar"/>
  <parm name="SYNCTYPE" value="6"/>
  <parm name="NAME" value="Calendar DB"/>
  <parm name="ACCEPT" value="text/x-vcalendar,text/vcal"/>
</characteristic>
</characteristic>
```

```
###END###
```

## Appendix B. Change History

(Informative)

### B.1 Approved Version 2.0 History

Reference	Date	Description
OMA-TS-DS_Provisioning-V2_0-20110719-A	19 Jul 2011	Status changed to Approved by TP: OMA-TP-2011-0258-INP_DS_V2_0_ERP_for_final_Approval