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<i>Dokansv/Godk - Doc respons/Approved</i> Erik Schütten	<i>Datum - Date</i> 2008-10-10	

Sending SMS in Mobidove

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1. Background

This document contains information how to use the Mobidove API to send SMS, Premium SMS and Binary SMS (wap-push) to mobile phones. The Mobidove API support HTTP(s) get/post, Raw XML and RPC Web Services (RPC/encoded and Document/literal).

2. Best method matrix

When the Mobidove can send messages using several protocols, every protocol has its own pros and cons:

HTTP(s) GET/POST

- pros: simple to use, fast execution
- cons: limited to 1 message and 1-10 receivers

Raw XML


- pros: best option to send multi messages/recipients (bulk)
- cons: special XML generation and parsing needed

Web Services Document/literal

- pros: simple to use, fast execution, standard type of .NET WS
- cons: limited to 1 message with 1 receiver

Web Services RPC/encoded

- pros: simple to use, fast execution, well known type of WS supported by most platforms
- cons: not supported by later .NET versions

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3. Parameters

The following sets of information have to be sent to the API. All parameters marked with (*) are required. Lookup parameters required formatting in formatting chapter below.

Login

username* = the account username provided by Quedro Ab
password* = your account password provided by Quedro Ab

Module Id

One user might have access to several send modules. Hence the system needs information about which module to use.

moduleid* = the module id provided by Quedro Ab
- or -
shortcode* = a shortcode provided by Quedro Ab
keyword* = a keyword provided by Quedro Ab

Operation

The API support several functions. The send function described in this document requires the following parameter:

operation* = 'sendSms' to use the send function

Originator

Message originator can be set by one of two parameters:

orgalpha alphanumeric originator
- or -
orgnumeric numeric only originator


Special handling

For special handling, you may also provide one or more rules connected to your account

rule = rule name provided by Quedro Ab

Message s and receivers

A message consists of two blocks, the message block and the receiver(s) block(s) inside the message block. Message may contain parameters of:

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msisdn*	=	receiver MSISDN
content*	=	the message content
heading	=	message heading (viewed in MCP control panel)
givenname	=	receiver given name
lastname	=	receiver last name
sendtime	=	time to send, to send immediate, just leave parameter empty
messagetype	=	the type of SMS
price	=	the price of premium message if premium sending
pushlink	=	the full link for push
sessid	=	session id from operator, required for premium in most countries
trakid	=	your own tracking id if you need one
property	=	message special property
dataset	=	an embedded file for usage in special rules

All parameters except msisdn, sessid, trakid and property may be set enclosed to each receiver block or to the message block. Parameter in the message block will be used if parameter is missing in the receiver block.

4. Parameters formatting

IMPORTANT! When sending by HTTP GET protocol, always urlencode parameters containing nonstandard characters, eg content, givenname, lastname, pushlink etc. For more info, please read the RFC1738 about Uniform Resource Locators (URL).

Some parameters have to be formatted to be accepted by system:

orgalpha

Alphanumeric string containing only characters a-z, A-Z and 0-9 (no whitespaces or extended characters allowed) and 1 - 11 characters length.

orgnumeric


Numeric string containing numbers only. Must be a full MSISDN (see below).

msisdn

This is the receiver mobile number formatted as a full MSISDN number, eg. countrycode, operatorcode and the number must be set whitout any trailing plus sign (+), zeroes or dial out codes etc. A receiver in Sweden will have a MSISDN like “46704567890”.

sendtime

The date and time to send must be formatted by the ISO-8601 standard (yyyy-mm-dd hh:mm).

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messagetype

Type of message can be one of this list:

sms	=	standard SMS
premium	=	premium SMS
pushbinary	=	binary push
pushbinarypremium	=	binary push as premium
pushtext	=	text push (standard SMS with link)
pushtextbinary	=	text push as premium
email	=	send e-mail (text format only)

Note! The messagetype parameter defaults to “sms” and not required when sending “sms” type only messages.

dataset

A dataset is an base64 encoded binary, text, html or XML file who need to be sent to MobiDove system. A special rule for handling the dataset must exist.

5. Receipts and error codes

Every sending ends with a returned receipt containing the following parameters:

msisdn	=	the recipient MSISDN
messageid	=	message internal id in sending
status	=	send immediate status
trakid	=	your own tracking id if you need one
sessionid	=	message id in Mobidove system
- or -		
error	=	errorcode
errormsg	=	error message


When using HTTP POST or GET methods, the receipt is returned as a semicolon (;) separated string, one row for each recipient.

Receipt syntax on success: “msisdn;messageid;status;trakid;sessionid”

Receipt syntax on error: “errorcode;errormessage”

The errors might be rule or operation specific but the standard error codes and messages are:

Error code	Error message
1	'ERROR! No valid moduleid found, system quit'
2	Login error, the message gives more information
3	'ERROR! Requested module ('modul id') not found, system quit'
4	'No input messages or receivers found, system quit'
5	'ERROR! No valid messages found, system quit'

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6. Delivery reports

Mobidove generates delivery reports which can be sent to any URL. The system will add trackingid and a status parameter with a value to the URL like:

<http://your.url.com/script.php?yourParameter=Sessionid&status=Statusvalue>.


The status field can take one of the following values:

received	=	Mobidove system has received the message
sent	=	the message has ben sent by Mobidve system
acked	=	the message has been received by operator
buffered	=	the message has been buffered by operator
delivered	=	the message has been received by receiver
failed	=	the message delivery has failed
spooled	=	the message has been buffered by Mobidove system

Note that one sent message might result in several delivery reports with different values in the status parameter regarding to message status at the moment!

To use delivery reports;

1. send a message thru Mobidove service
2. save the sessionid parameter from receipt together with the sent message
3. bind received delivery reports status by the sessionid

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7. Send by HTTP GET, basic example

Sending by HTTP may be done as GET or POST data. Only one (1) message block, containing 1-10 receivers, may be sent on each request, array parameters have to be proper set in a flat style.

When the Mobidove service have several operations, a HTTP call also have to include a proper operation in the request string. To send a SMS type of message, the “sendSms” operation is used.


Example 1. One message with SMS content and two receivers:

```
http://host/index.php?operation=sendSms&username=Username&password=Password&moduleid=Moduleid&content=Content+to+send&msisdn[]=467123456789&msisdn[]=46711223344
```

Example 2. One message with binary push content and one receiver:

```
http://host/index.php?operation=sendSms&username=Username&password=Password&moduleid=Moduleid&content=Content+to+send&msisdn[]=467123456789&messagetype[]=pushbinary&pushlink[]=http://your.server.here
```

PLEASE NOTE! Always urlencode parameters with nonstandard characters when sending by GET!

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8. Send by Web Services Document/literal, C# basic example

The web services interface enable messaging by standard WSDL regarding to the WS-I Basic Profile 1.0 (Document/literal), using parameters specification described in this document. This WS is limited to 1 message with 1 receiver.

WSDL file is found at URL: <http://host/soap/send.php?WSDL>


Consume WS with C#, basic example:

```
Mobidove mob = new Mobidove();
config cnf = new config();
cnf.username = "Username";
cnf.password = "Password";
cnf.moduleid = "Moduleid";

message msg = new message();
msg.msisdn = "MSISDN";
msg.content = "Content";

receipt rs = mob.sendSms(cnf, msg);

int messageid = rs.messageid;
string msisdn = rs.msisdn;
string sessionid = rs.sessionid;
string status = rs.status;
string errorid = rs.error;
string errormsg = rs.errormsg;
```

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9. Send by Web Services RPC/encoded, PHP basic example

The web services interface enable messaging by standard WSDL regarding to the SOAP 1.1 protocol (RPC/encoded), using parameters specification described in this document.

WSDL file is found at URL: <http://host/rpc/send.php?WSDL>

Consume WS with the PHP library NuSoap, basic example:

```
<?php

// load NuSoap library
require_once('your_path_to/nusoap.php');

// initiate a new client
$c = new soapclient('http://host/rpc/send.php?wsdl', 'wsdl');

// set config array
$config = array ('username'=>'your_username',
                'password'=>'your_password',
                'moduleid'=>'your_moduleid');


// add one receiver
$receivers[] = array ('msisdn'=>'467123456789');

// add one message
$messages[] = array ('content'=>'your content here',
                    'receivers'=>$receivers);

// send the message
$result = $c->call('sendSms',
                 array ('config'=>$config, 'messages'=>$messages));

print_r($result);

?>
```

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10. Send by Raw XML, basic example

When using Raw XML sending, a XML file is sent to Mobidove system as a HTTP POST with application/xml content-type. The returned receipt will also be an XML.

XML example sending 1 message with 2 receivers:

```
<?xml version="1.0" encoding="utf-8"?>
<servicerequest>
  <config>
    <operation>sendSms</operation>
    <username>Username</username>
    <password>Password</password>
    <moduleid>Moduleid</moduleid>
  </config>
  <messages>
    <message>
      <content>Content text here</content>
      <receivers>
        <receiver>
          <msisdn>46712346789</msisdn>
        </receiver>
        <receiver>
          <msisdn>46711223344</msisdn>
        </receiver>
      </receivers>
    </message>
  </messages>
</servicerequest>
```

Send POST example by PHP and cUrl lib:

```
$post = "POST /xml/send.php HTTP/1.1\r\n".
  "Host: http://host\r\n".
  "Content-type: application/x-www-form-urlencoded\r\n".
  "User-Agent: Mozilla 4.0\r\n".
  "Content-length: ".strlen($send_xml)."\r\n".
  "Connection: close\r\n\r\n".
  $send_xml;
$ch = curl_init();
curl_setopt($ch, CURLOPT_URL, $url);
curl_setopt($ch, CURLOPT_CUSTOMREQUEST, $post);
curl_setopt($ch, CURLOPT_FOLLOWLOCATION, 1);
curl_setopt($ch, CURLOPT_RETURNTRANSFER, 1);
$returned_xml = curl_exec($ch);
curl_close($ch);

// remove cURL bool TRUE on successfull but empty result
if (!is_string($returned_xml) || !strlen($returned_xml)) {
  $returned_xml = '';
}
```