



MOBBIS LLC , 1/19/2009

XML API 2.0

Functional specification



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1. Introduction

1.1. Document identifier

This is the specification of the XML API 2.0 implemented by MOBBIS LLC.

1.2. Scope

This document contains the description of the interface of the Web service providing the XML API and the description of the return codes and values of methods provided by the Web service.

It also contains the definition of the terms and acronyms used in the text and references to the useful links.

1.3. Definition of terms

HTTPS - <http://en.wikipedia.org/wiki/HTTPS>

SMS - http://en.wikipedia.org/wiki/Short_message_service

MOBIPACE - <http://www.mobipace.com>

ASCII - <http://en.wikipedia.org/wiki/ASCII>

UTC - <http://en.wikipedia.org/wiki/UTC>

UNICODE - <http://en.wikipedia.org/wiki/Unicode>

Web Service - http://www.webopedia.com/TERM/W/Web_services.html

WSDL - http://en.wikipedia.org/wiki/Web_Services_Description_Language

2. References

[1]. <http://www.mobipace.com>

[2]. <http://www.mobbis.mobi>

[3]. <http://www.mobbis.am>

[4]. http://en.wikipedia.org/wiki/List_of_Unicode_characters

[5]. <http://en.wikipedia.org/wiki/ASCII>

[6]. HTTP_API_Specification

3. Overview

XML API is a Web services technology based platform independent protocol and allows to send/schedule large volumes of messages through MOBIPACE SMS gateway and request the statuses of a train of messages.

Requests sent to the Web service are being processed by the Web service located at the https://www.mobipace.com/API_2_0/XML_API.aspx

User can develop the front-end for the XML API on any platform, operation system, and programming language and send SMS to more than 200 countries of the world. Full list of countries and operators you can find on our web site <http://www.mobipace.com>.

The main advantage of XML API against HTTP and .NET API is that XML API gives opportunity to send/schedule large volumes of SMS within very short time and also provides a possibility to get the status of the large portions of SMS.

4. Description of the XML API interface

This section contains the description of the methods provided by the Web service which realizes the XML API located at the https://www.mobipace.com/API_2_0/XML_API.aspx.

4.1. Description of Web service methods

The Web service is implemented in namespace <http://www.mobipace.com>.

All the methods provided by the Web service require username and password for authentication, which does not require to keep permanent connection with the GateWay.

The public methods of the Web service return an object of type "MOBBIS.XmlApiDefinitions.ReturnType", which contains a field specifying the status of the processing of the method and the collection of strings with the return data. The structure is given below:

```
public struct ReturnType
{
    public string[] m_data;

    public string m_status;
};
```

where

m_data defines the collection of strings which should contain the data supposed to be returned by the concrete Web service method,

m_status defines the status of the processing of the method. The possible values of the return codes are described in the section [6](#).

The public methods of the API are described below.

4.1.1. ScheduleMessages

This method sends a train of the messages to the MOBIPACE SMS gateway to be scheduled and sent after.

The signature of the method is:

```
public MOBBIS.XmlApiDefinitions.ReturnType ScheduleMessages(string UserName,
    string Password,
    MOBBIS.XmlApiDefinitions.XMLMessage[] s)
```

where

UserName - is the login name of the already registered user. For individuals the UserName is the cell phone number by which the user has been registered, for juridical persons the value of the UserName is being provided by MOBBIS LLC after signing the contract (see [\[1\]](#) for details).

Password - is the password of the already registered user

s - container of the objects of type MOBBIS.XmlApiDefinitions.XMLMessage structure containing the information of the messages needed to schedule. The description of the structure is given in below.

```
public struct XMLMessage
{
    public string m_sender;
    public string m_recipient;
    public string m_body;
    public string m_wap_push;
    public string m_utc_date_time;
}
```

m_sender specifies the string which should be used as the name of the sender in the message. Note, that if the user is not allowed to specify the sender of the message (e.g. individual persons), the UserName (e.g. cell phone number for individuals) will be used as sender name.

m_recipient specifies the cell phone number of the recipient.

m_body specifies the text which should be sent. If the size of one message exceeds 160 symbols (the maximum length of the SMS message), the message will be automatically split into corresponding count of messages and then sent to the recipient sequentially.

It is possible to send both UNICODE (see [4]) and ASCII (see [5]) type of messages.

Note, that the message will be considered as UNICODE message if it contains even one UNICODE symbol. In this case the count of the messages from which the specified one will consist of can be increased.

m_wap_push specifies whether the message should be considered as Wap Push (see http://en.wikipedia.org/wiki/Wap_push#WAP_Push) or SMS (see http://en.wikipedia.org/wiki/Short_message_service).

m_utc_date_time specifies the date/time when the message should be sent in UTC format (see <http://en.wikipedia.org/wiki/UTC>).

The method returns an object of type *MOBBIS.XmlApiDefinitions.ReturnType* structure, where **m_data** contains the message references (IDs) of the messages, which should be used in the future to refer to needed message.

4.1.2. QueryMessages

The method request the statuses of the train of messages by message references (IDs) returned method **ScheduleMessages** and methods provided by HTTP API (see [6]).

The signature of the method is:

```
public MOBBIS.XmlApiDefinitions.ReturnType QueryMessages(string UserName,
                                                         string Password,
                                                         string[] s)
```

where

UserName - is the login name of the already registered user. For individuals the UserName is the cell phone number by which the user has been registered, for juridical persons the value of the UserName is being provided by MOBBIS LLC after signing the contract ((see [1] for details)

Password - is the password of the already registered user

s - container of the strings specifying the message references (IDs) of the messages which statuses are being requested.

The method returns an object of type *MOBBIS.XmlApiDefinitions.ReturnType* structure, where **m_data** contains the statuses of the messages passed by the argument **s**. The k-th field of **m_data** specifies the status of the message with message reference **s[k]** .

5. Appendix

5.1. Message statuses

Status	Value	Description
Pending	0	The status of the SMS message is unknown, SMS is in queue.
Sent	1	The SMS message is sent and delivered.
DeliveryToNet work	2	The SMS message is delivered to operator.

TimeOut	3	The connection is interrupted, operator may be overloaded.
OutOfBalance	4	Out of balance, SMS is not delivered.
Scheduled	5	The SMS message will be sent at the scheduled time.
DeliveredToGateway	6	The SMS message is delivered to gateway but status unknown.
Rejected	7	Rejected, may be wrong destination or sender id.
NotSent	8	Wrong destination or internal error.
Unknown	9	Incorrect message ID

5.2. Error codes of methods

Error	Code	Description
IncorrectParameters	700	Incorrect parameters in user's request.
AuthenticationFailed	701	Incorrect username or password.
OutOfBalance	702	Not enough balance to send SMS message.
IncorrectMessageRef	703	Incorrect message references.
IncorrectRecipient	704	The SMS message rejected.
IncorrectDateFormat	705	The format of the date/time is incorrect.
OperationSucceeded	706	The operation (activate, register) has been processed successfully
IncorrectActivationCode	707	The activation code is incorrect.
OutOfDateTime	708	The specified date/time (for function 'schedule') is out of date
IncorrectCurrency	709	The specified currency is incorrect
IncorrectEmailFormat	710	The format of the specified email is incorrect
UserIsAlreadyRegistered	711	User account with specified username is already registered
UnknownError	712	Indicates an unknown error.

5.3. WSDL of the XML XPI Web service methods

5.3.1. WSDL description of ScheduleMessages

```
<?xml version="1.0" encoding="utf-8" ?>
```

```
<wsdl:definitions xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
xmlns:tm="http://microsoft.com/wsdl/mime/textMatching/"
xmlns:soapenc="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:mime="http://schemas.xmlsoap.org/wsdl/mime/"
```

```

xmlns:tns="http://www.mobipace.com/"
xmlns:s="http://www.w3.org/2001/XMLSchema"
xmlns:soap12="http://schemas.xmlsoap.org/wsdl/soap12/"
xmlns:http="http://schemas.xmlsoap.org/wsdl/http/"
targetNamespace="http://www.mobipace.com/"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:types>
    <s:schema elementFormDefault="qualified"
targetNamespace="http://www.mobipace.com/">
      <s:element name="ScheduleMessages">
        <s:complexType>
          <s:sequence>
            <s:element minOccurs="0" maxOccurs="1" name="UserName"
type="s:string" />
            <s:element minOccurs="0" maxOccurs="1" name="Password"
type="s:string" />
            <s:element minOccurs="0" maxOccurs="1" name="s"
type="tns:ArrayOfXMLMessage" />
          </s:sequence>
        </s:complexType>
      </s:element>
      <s:complexType name="ArrayOfXMLMessage">
        <s:sequence>
          <s:element minOccurs="0" maxOccurs="unbounded"
name="XMLMessage" type="tns:XMLMessage" />
        </s:sequence>
      </s:complexType>
      <s:complexType name="XMLMessage">
        <s:sequence>
          <s:element minOccurs="0" maxOccurs="1" name="m_sender"
type="s:string" />
          <s:element minOccurs="0" maxOccurs="1" name="m_recipient"
type="s:string" />
          <s:element minOccurs="0" maxOccurs="1" name="m_body"
type="s:string" />
          <s:element minOccurs="0" maxOccurs="1" name="m_wap_push"
type="s:string" />
          <s:element minOccurs="0" maxOccurs="1" name="m_utc_date_time"
type="s:string" />
        </s:sequence>
      </s:complexType>
      <s:element name="ScheduleMessagesResponse">
        <s:complexType>
          <s:sequence>

```

```

        <s:element minOccurs="1" maxOccurs="1"
name="ScheduleMessagesResult" type="tns:ReturnType" />
    </s:sequence>
</s:complexType>
</s:element>
<s:complexType name="ReturnType">
    <s:sequence>
        <s:element minOccurs="0" maxOccurs="1" name="m_data"
type="tns:ArrayOfString" />
        <s:element minOccurs="0" maxOccurs="1" name="m_status" type="s:string"
/>
    </s:sequence>
</s:complexType>
<s:complexType name="ArrayOfString">
    <s:sequence>
        <s:element minOccurs="0" maxOccurs="unbounded" name="string"
nillable="true" type="s:string" />
    </s:sequence>
</s:complexType>
<s:element name="QueryMessages">
    <s:complexType>
    <s:sequence>
        <s:element minOccurs="0" maxOccurs="1" name="UserName"
type="s:string" />
        <s:element minOccurs="0" maxOccurs="1" name="Password"
type="s:string" />
        <s:element minOccurs="0" maxOccurs="1" name="s"
type="tns:ArrayOfString" />
    </s:sequence>
    </s:complexType>
</s:element>
<s:element name="QueryMessagesResponse">
    <s:complexType>
    <s:sequence>
        <s:element minOccurs="1" maxOccurs="1"
name="QueryMessagesResult" type="tns:ReturnType" />
    </s:sequence>
    </s:complexType>
</s:element>
</s:schema>
</wsdl:types>
<wsdl:message name="ScheduleMessagesSoapIn">

```

```

<wsdl:part name="parameters" element="tns:ScheduleMessages" />
</wsdl:message>
<wsdl:message name="ScheduleMessagesSoapOut">
  <wsdl:part name="parameters" element="tns:ScheduleMessagesResponse" />
</wsdl:message>
<wsdl:message name="QueryMessagesSoapIn">
  <wsdl:part name="parameters" element="tns:QueryMessages" />
</wsdl:message>
<wsdl:message name="QueryMessagesSoapOut">
  <wsdl:part name="parameters" element="tns:QueryMessagesResponse" />
</wsdl:message>
<wsdl:portType name="XML_APISoap">
  <wsdl:operation name="ScheduleMessages">
    <wsdl:input message="tns:ScheduleMessagesSoapIn" />
    <wsdl:output message="tns:ScheduleMessagesSoapOut" />
  </wsdl:operation>
  <wsdl:operation name="QueryMessages">
    <wsdl:input message="tns:QueryMessagesSoapIn" />
    <wsdl:output message="tns:QueryMessagesSoapOut" />
  </wsdl:operation>
</wsdl:portType>
<wsdl:binding name="XML_APISoap" type="tns:XML_APISoap">
<soap:binding transport="http://schemas.xmlsoap.org/soap/http" />
<wsdl:operation name="ScheduleMessages">
  <soap:operation soapAction="http://www.mobipace.com/ScheduleMessages"
style="document" />
  <wsdl:input>
    <soap:body use="literal" />
  </wsdl:input>
  <wsdl:output>
    <soap:body use="literal" />
  </wsdl:output>
</wsdl:operation>
  <wsdl:operation name="QueryMessages">
    <soap:operation soapAction="http://www.mobipace.com/QueryMessages"
style="document" />
    <wsdl:input>
      <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>

```

```

        <soap:body use="literal" />
    </wsdl:output>
</wsdl:operation>
</wsdl:binding>
<wsdl:binding name="XML_APISoap12" type="tns:XML_APISoap">
    <soap12:binding transport="http://schemas.xmlsoap.org/soap/http" />
    <wsdl:operation name="ScheduleMessages">
        <soap12:operation
soapAction="http://www.mobipace.com/ScheduleMessages" style="document" />
        <wsdl:input>
            <soap12:body use="literal" />
        </wsdl:input>
        <wsdl:output>
            <soap12:body use="literal" />
        </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="QueryMessages">
        <soap12:operation soapAction="http://www.mobipace.com/QueryMessages"
style="document" />
        <wsdl:input>
            <soap12:body use="literal" />
        </wsdl:input>
        <wsdl:output>
            <soap12:body use="literal" />
        </wsdl:output>
    </wsdl:operation>
</wsdl:binding>
<wsdl:service name="XML_API">
    <wsdl:port name="XML_APISoap" binding="tns:XML_APISoap">
        <soap:address
location="http://localhost:1406/mobipace/API_2_0/XML_API.asmx" />
    </wsdl:port>
    <wsdl:port name="XML_APISoap12" binding="tns:XML_APISoap12">
        <soap12:address
location="http://localhost:1406/mobipace/API_2_0/XML_API.asmx" />
    </wsdl:port>
</wsdl:service>
</wsdl:definitions>

```

5.3.2.

WSDL description of QueryMessages

```
<?xml version="1.0" encoding="utf-8" ?>
```

```

<wsdl:definitions xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
xmlns:tm="http://microsoft.com/wsdl/mime/textMatching/"
xmlns:soapenc="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:mime="http://schemas.xmlsoap.org/wsdl/mime/"
xmlns:tns="http://www.mobipace.com/"
xmlns:s="http://www.w3.org/2001/XMLSchema"
xmlns:soap12="http://schemas.xmlsoap.org/wsdl/soap12/"
xmlns:http="http://schemas.xmlsoap.org/wsdl/http/"
targetNamespace="http://www.mobipace.com/"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:types>
    <s:schema elementFormDefault="qualified"
targetNamespace="http://www.mobipace.com/">
      <s:element name="ScheduleMessages">
        <s:complexType>
          <s:sequence>
            <s:element minOccurs="0" maxOccurs="1" name="UserName"
type="s:string" />
            <s:element minOccurs="0" maxOccurs="1" name="Password"
type="s:string" />
            <s:element minOccurs="0" maxOccurs="1" name="s"
type="tns:ArrayOfXMLMessage" />
          </s:sequence>
        </s:complexType>
      </s:element>
      <s:complexType name="ArrayOfXMLMessage">
        <s:sequence>
          <s:element minOccurs="0" maxOccurs="unbounded"
name="XMLMessage" type="tns:XMLMessage" />
        </s:sequence>
      </s:complexType>
      <s:complexType name="XMLMessage">
        <s:sequence>
          <s:element minOccurs="0" maxOccurs="1" name="m_sender"
type="s:string" />
          <s:element minOccurs="0" maxOccurs="1" name="m_recipient"
type="s:string" />
          <s:element minOccurs="0" maxOccurs="1" name="m_body"
type="s:string" />
          <s:element minOccurs="0" maxOccurs="1" name="m_wap_push"
type="s:string" />
          <s:element minOccurs="0" maxOccurs="1" name="m_utc_date_time"
type="s:string" />
        </s:sequence>
      </s:complexType>
    </s:element name="ScheduleMessagesResponse">

```

```

        <s:complexType>
            <s:sequence>
                <s:element minOccurs="1" maxOccurs="1"
name="ScheduleMessagesResult" type="tns:ReturnType" />
            </s:sequence>
        </s:complexType>
    </s:element>
    <s:complexType name="ReturnType">
        <s:sequence>
            <s:element minOccurs="0" maxOccurs="1" name="m_data"
type="tns:ArrayOfString" />
            <s:element minOccurs="0" maxOccurs="1" name="m_status" type="s:string"
/>
        </s:sequence>
    </s:complexType>
    <s:complexType name="ArrayOfString">
        <s:sequence>
            <s:element minOccurs="0" maxOccurs="unbounded" name="string"
nillable="true" type="s:string" />
        </s:sequence>
    </s:complexType>
    <s:element name="QueryMessages">
        <s:complexType>
            <s:sequence>
                <s:element minOccurs="0" maxOccurs="1" name="UserName"
type="s:string" />
                <s:element minOccurs="0" maxOccurs="1" name="Password"
type="s:string" />
                <s:element minOccurs="0" maxOccurs="1" name="s"
type="tns:ArrayOfString" />
            </s:sequence>
        </s:complexType>
    </s:element>
    <s:element name="QueryMessagesResponse">
        <s:complexType>
            <s:sequence>
                <s:element minOccurs="1" maxOccurs="1"
name="QueryMessagesResult" type="tns:ReturnType" />
            </s:sequence>
        </s:complexType>
    </s:element>
</s:schema>

```

```

    </wsdl:types>
<wsdl:message name="ScheduleMessagesSoapIn">
    <wsdl:part name="parameters" element="tns:ScheduleMessages" />
</wsdl:message>
<wsdl:message name="ScheduleMessagesSoapOut">
    <wsdl:part name="parameters" element="tns:ScheduleMessagesResponse" />
</wsdl:message>
<wsdl:message name="QueryMessagesSoapIn">
    <wsdl:part name="parameters" element="tns:QueryMessages" />
</wsdl:message>
<wsdl:message name="QueryMessagesSoapOut">
    <wsdl:part name="parameters" element="tns:QueryMessagesResponse" />
</wsdl:message>
<wsdl:portType name="XML_APISoap">
    <wsdl:operation name="ScheduleMessages">
        <wsdl:input message="tns:ScheduleMessagesSoapIn" />
        <wsdl:output message="tns:ScheduleMessagesSoapOut" />
    </wsdl:operation>
    <wsdl:operation name="QueryMessages">
        <wsdl:input message="tns:QueryMessagesSoapIn" />
        <wsdl:output message="tns:QueryMessagesSoapOut" />
    </wsdl:operation>
</wsdl:portType>
<wsdl:binding name="XML_APISoap" type="tns:XML_APISoap">
<soap:binding transport="http://schemas.xmlsoap.org/soap/http" />
<wsdl:operation name="ScheduleMessages">
    <soap:operation soapAction="http://www.mobipace.com/ScheduleMessages"
style="document" />
    <wsdl:input>
        <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal" />
    </wsdl:output>
</wsdl:operation>
    <wsdl:operation name="QueryMessages">
        <soap:operation soapAction="http://www.mobipace.com/QueryMessages"
style="document" />
        <wsdl:input>
            <soap:body use="literal" />

```

```

        </wsdl:input>
        <wsdl:output>
            <soap:body use="literal" />
        </wsdl:output>
    </wsdl:operation>
</wsdl:binding>
<wsdl:binding name="XML_APISoap12" type="tns:XML_APISoap">
    <soap12:binding transport="http://schemas.xmlsoap.org/soap/http" />
    <wsdl:operation name="ScheduleMessages">
        <soap12:operation
soapAction="http://www.mobipace.com/ScheduleMessages" style="document" />
        <wsdl:input>
            <soap12:body use="literal" />
        </wsdl:input>
        <wsdl:output>
            <soap12:body use="literal" />
        </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="QueryMessages">
        <soap12:operation soapAction="http://www.mobipace.com/QueryMessages"
style="document" />
        <wsdl:input>
            <soap12:body use="literal" />
        </wsdl:input>
        <wsdl:output>
            <soap12:body use="literal" />
        </wsdl:output>
    </wsdl:operation>
</wsdl:binding>
<wsdl:service name="XML_API">
    <wsdl:port name="XML_APISoap" binding="tns:XML_APISoap">
        <soap:address
location="http://localhost:1406/mobipace/API_2_0/XML_API.asmx" />
    </wsdl:port>
    <wsdl:port name="XML_APISoap12" binding="tns:XML_APISoap12">
        <soap12:address
location="http://localhost:1406/mobipace/API_2_0/XML_API.asmx" />
    </wsdl:port>
</wsdl:service>
</wsdl:definitions>

```