INTERACTION PROTOCOL WITH MOBIPACE SYSTEM

Developer's Guide. Version 3.0

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This document is part of the technical documentation of the MOBIPACE system.

MOBIPACE help system: http://www.mobipace.com/ru/help

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Overview

For the purposes of this document, the term "Partner" is the user who is registered in the MOBIPACE system. The term "Recipient" should be understood as a cellular subscriber to whom messages are sent.

Software interaction of the Partner's software with the MOBIPACE system is carried out via the Internet using TCP/IP as the transport layer protocol.

The maximum time to wait for a response to any request should not exceed 60 seconds. If there is no response to the request, it's necessary to check the status of the connection with the system.

HTTP API 3.0 limitations

Social network accounts

To use HTTP API 3.0, Partners who have registered and use the system through social networking accounts, must set a password in the personal account of the MOBIPACE system in the "Personal data" section.

- 1. Within one request, Partner can send messages up to 20,000 recipients. Please note that the MOBIPACE system accepts only one request at a time for the same account.
- 2. Recipient number must be indicated in international format (max. 15 digits).
- 3. The maximum length of a message to send is 500 characters (including spaces and punctuation).
- 4. To successfully submit messages to the server, you also need:
 - Set the account currency in the MOBIPACE system, in the "Personal data" section After registration
 - Send messages only from registered sender names. Sender names must first be agreed with Your account manager.
- 5. System time

If you want to schedule and send messages according to your local time, you need to set your time zone in the MOBIPACE system, in the "Personal data" section.

By default, the MOBIPACE system time is set in UTC (Coordinated Universal Time) format.

HTTP API 3.0 methods

Data is exchanged via the HTTPS protocol, i.e. HTTP (RFC 2068, RFC 2616) with the mandatory use of the SSL/TLS layer.

Connection to the server is established on port 444.

Requests are sent by the POST method in JSON format.

There are five methods for querying the MOBIPACE system:

- Authorization
- Send
- Calculate price
- Query message
- Query balance

Each of the five query methods uses its own Internet address (URL).

The data exchange between the Partner's software and the MOBIPACE server must be interpreted in JSON format.

All responses from MOBIPACE system to the Partner Software are also interpreted in JSON format.

The Partner must ensure the correct recognition of the JSON data received from the MOBIPACE server.

Authorization

To be able to send data to MOBIPACE system, you must first authorize on the MOBIPACE server.

Upon successful authorization, the system opens the session with the assignment of a unique ID. This ID should be used by Partner to send data to the server.

Session timeout is equal to 60 seconds after from last request.

Upon timeout, the server automatically closes the session, after which it's necessary to go through the authorization process again to generate new session ID.

To use HTTP API 3.0, Partners who have registered and use the system through social network accounts, must set a password for account in the "Personal data" section.

Internet address for authorization:

https://api.mobipace.com:444/v3/authorize

Requests should be sent by the POST method in JSON format.

Parameters expected in the authorization request:

Parameter	Type	Description	Mandatory
Username	string	MOBIPACE username	YES
Password	string	MOBIPACE password	YES

MOBIPACE system response parameters:

Parameter	Type	Description
StatusCode	integer	Authentication status code
Status	string	Text description of authentication status
SessionId	string	SessionID assigned to Partner after successful authentication

Example JSON request for authorization:

```
{
    "Username": "mobipace@mobipace.com",
    "Password": "123456"
}
```

Example server response:

```
{
    "StatusCode": 101,
    "Status": "Success",
    "SessionId": "4060b129-2d75-4b7e-9c3a-61b7769a5d2b"
```

Send

This method is designed to send messages to the MOBIPACE server.

Internet address for sending messages:

https://api.mobipace.com:444/v3/Send

Requests should be sent by the POST method in JSON format.

You must first authorize on the MOBIPACE server to be able to successfully send messages.

You should have sufficient balance to successfully proceed messages.

Parameters expected in the request for sending messages:

Parameter	Type	Description	Mandatory
SessionId	string	Session ID assigned to Partner after successful authorization	YES
ScheduledDate	string	Date and Time of sending messages. Date and Time format "yyyy-mm-dd"	NO
SendWithinHours	integer	Defines the distribution of messages sending (speed) within specified time. Allowed values 0-23(hours)	NO
IsWapPush	string	Defines the type of message (wap push or SMS) Allowed values "true" or "false"	NO
Sender	string	SenderName from which recipient will receive message. Please note that SenderName nust agreed and accepted by your account manager	YES
Messages	collection [Message]	Array of messages to send	YES

The structure of the collection [Message]:

Parameter	Type	Decription	Mandatory
Recipient	string	The recipient's mobile number in international format without "+" or "00" Example: 79851112233	YES
Body	string	Text of message	YES
Reference	string	Unique ID assigned to the message by your system. Must be used in case you are planning to use QueryMessage method	NO

MOBIPACE system response:

Parameter	Type	Description	
StatusCode	integer	Request Status Code	
Status	string	Status Code Description	
MessageCount	integer	Count of accepted messages	
PartCount	integer	Count of accepted messages	
		segments	
AveragePrice	decimal	Average billed price	
TotalPrice	decimal	Total billed price	

```
Example JSON request for sending messages (only with mandatory parameters):
    "SessionId": "4060b129-2d75-4b7e-9c3a-61b7769a5d2b"
    "Sender": "MOBIPACE",
    "Messages": [
                     { "Recipient" : "7925XXXXXX", "Body" : "SMS Message 1", "Reference" : "unique reff" },
                     { "Recipient" : "7925XXXXXX", "Body" : "SMS Message 2", "Reference" : "unique reff" }
}
Example JSON request for sending messages (with all available parameters):
   "SessionId": "4060b129-2d75-4b7e-9c3a-61b7769a5d2b",
   "ScheduledDate": "2019-07-25 18:20",
   "SendWithinHours": 10,
    "IsWapPush": "false",
    "Sender": "MOBIPACE",
    "Messages": [
                     { "Recipient" : "7925XXXXXX", "Body" : "SMS Message 1", "Reference" : "unique reff" },
                     { "Recipient" : "7925XXXXXX", "Body" : "SMS Message 2", "Reference" : "unique reff" }
                ]
Example of server response:
    "StatusCode": 101,
    "Status": "Success",
    "MessageCount": 10,
    "PartCount": 10,
    "AveragePrice": 2.50,
    "TotalPrice": 25.00
```

Calculate price

The method is designed to calculate the cost of sending messages and calculates the cost of sending specified number of messages without sending.

The parameters used in the request are identical to those which were described in the **Send** method.

Internet address for calculating the cost of messages to be send:

https://api.mobipace.com:444/v3/Calculate

Requests should be sent by the POST method in JSON format.

You must first authorize on the MOBIPACE server to be able to successfully send messages.

Query message

The method is designed to query the current status of previously sent messages.

Important! To be able to use functionality of this method, it is required to assign unique ID to every message when submitting messages via <u>Send</u> method. Unique IDs should be defined in Reference parameter of [Message] collection (see Send method description).

Internet address for requesting statuses:

https://api.mobipace.com:444/v3/QueryMessages

Requests should be sent by the POST method in JSON format.

You must first authorize on the MOBIPACE server to be able to successfully send messages.

Parameters expected in the request for query message status:

Parameter	Type	Description	Mandatory
SessionId	string	Session ID assigned to Partner after successful authorization	YES
References	collection[string]	Array of unique IDs assigned to messages by your system, while using Send method	YES

MOBIPACE system response:

Parameter	Type	Description
StatusCode	integer	Request Status Code
Status	string	Status Code Description
MessageStatuses	collection[MessageStatus]	Array of requested messages
		statuses

The structure of the collection [MessageStatus]:

Parameter	Type	Description	
Reference	string	Unique ID assigned to message by your system while using Send method	
StatusCode	integer	Message status code	
Status	string	Message status description	

Query balance

The method is designed to query the current account balance.

Internet address to request the current balance:

https://api.mobipace.com:444/v3/QueryBalance

Requests should be sent by the POST method in JSON format. You must first <u>authorize</u> on the MOBIPACE server to be able to successfully send messages.

Parameters expected in the request for query balance:

Parameter	Type	Description	Mandatory
SessionId	string	Session ID assigned to Partner after successful authorization	YES

MOBIPACE system response:

Parameter	Type	Description
StatusCode	integer	Request Status Code
Status	string	Status Code Description
Balance	decimal	Current balance
BalaceNegativeLimit	decimal	Credit limit
AvailableFund	decimal	Available funds possible to use
		including credit

```
Example JSON request ("Query balance" method):

{
    "SessionId": "4060b129-2d75-4b7e-9c3a-61b7769a5d2b"
}

Example of server response ("Query balance" method):

{
    "StatusCode": 101,
    "Status": "Success",
    "Balance": "1300.30",
    "BalanceNegativeLimit": "-1000",
    " AvailableFund ": "2300.30"
}
```

Message Status Possible Values

Code	Value	Description
1	Pending	Message is being prepared for sending
2	Scheduled	Message scheduled and queued for sending
3	Sent	Message Sent
4	OutOfBalance	Not enough funds to send messages
5	InvalidMobile	Invalid mobile format
6	InvalidBody	Count of symbols in message body exceed. Up to 500 symbols accepted.
7	InvalidSender	SenderName is not registered. Contact your account manager
8	InvalidRoute	Destination route is not set. Contact your account manager
9	BlockedMobile	Recipient mobile number is blocked in MOBIPACE system
10	Unknown	System generic error. Request not proceeded
100	Delivered	Message delivered to recipient
101	Undeliverable	Message not delivered to recipient
102	ACK expired	Message sent, but message status unknown
103	Rejected	Message rejected by operator
104	TimeOut	System error. Message processing timeout reached. Message was not sent

Error codes and their meanings

Code	Value	Description
100	Unknown	System generic error.
101	Success	Request successfully completed
102	IncorrectParameter	Invalid request format
103	SessionExpired	Session ID is not found
		System currently processing
104	AccessDenied	another request with same
		Session ID
200	IncorrectUserNameOrPassword	Invalid Username or Password
		Number of allowable mistakes
201	UserLocked	during authorisation exceed.
		Contact your account manager.
202	UserBlocked	User blocked by administrator.
		Contact your account manager.
300	OutOfBalance	Not enough funds to send
300		messages
		MOBIPACE allows to send up
301	MessageCountOverflow	to 20000 messages within one
		request
302	CurrencyNotDefined	Account currency is not defined.
		Go to "Settings" section and
		define your account currency.

Changes in HTTP API 3.0 of the MOBIPACE system

- 1. MOBIPACE reserves the right to make changes to the HTTP API 3.0 functionality.
- 2. Partner's software should process server messages without errors, in case of new restrictions. The appearance of new restrictions should not cause malfunction of the Partner's software and/or errors in the server responses interpretation.
- 3. MOBIPACE will inform the Partners about the changes and publish corresponding information on the website at least 14 days before changes take effect.
 - During this period, the Partner must make the necessary changes in his software and verify the its functionality.
- 4. If changes will result to malfunctions in the Partner's software and the corresponding changes cannot be performed until the deadline, the Partner's responsible person should contact MOBIPACE technical support.
- 5. MOBIPACE management team can postpone the deadlines in case of necessity.
- 6. Information about changes published on the www.mobipace.com should be regularly reviewed by the Partner.

Resources

- HTTP HyperText Transfer Protocol https://en.wikipedia.org/wiki/Hypertext_Transfer_Protocol
- TCP Transmission Control Protocol for TCP/IP Networks and Subnets https://en.wikipedia.org/wiki/Transmission Control Protocol
- JSON- JavaScript Object Notation (text-based data exchange format based on JavaScript and commonly used with this language) https://en.wikipedia.org/wiki/JSON
- POST (HTTP)- one of the many query methods supported by the HTTP protocol https://en.wikipedia.org/wiki/POST_(HTTP)