API OTP Interface

Ref. 16031701 - Authentification OTP SMS.

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Index

1 Introduction

This document explains the LabsMobile API OTP Interface. It is designed for technicians and clients that wish to verify or validate a device or mobile number. The purpose of integration is to generate single-use passwords, validate them and authentication list management.

This document contains a detailed explanation of the integration process. If you have any questions or need examples of code, please contact your usual LabsMobile agent or contact us at:

support@labsmobile.com

www.labsmobile.com

2 Sending commands

2.1 Required information

For the integration with the API OTP Interface the following information provided by LabsMobile is essential:

- Username and password (shown on the registration e-mail)
- Specific URL for each command.

2.2 HTTP/GET call

Sending commands is done with HTTP/GET calls to an URL with the following format:

```
https://api.labsmobile.com/otp/<command>
```

The HTTP/GET call must be authenticated as detailed below and must also contain the necessary GET variables to process the request.

2.3 Validation codes

OTP validation codes are generated based on the mobile number, environment and the specific time when the request is received. The code is unique for each number and environment and a new code should be generated for each new validation process.

Validations are part of an environment to identify the project, application or version that belongs the validation process. There can only be a pending code validation or ongoing for a specific mobile number and environment.

The codes have a format of 6 alphanumeric characters. Example: *RSW51A*

2.4 Validation diagram

sendCode / resendCode (phone_number, env)

SMS (code)

validateCode (prhone_number, env, code)
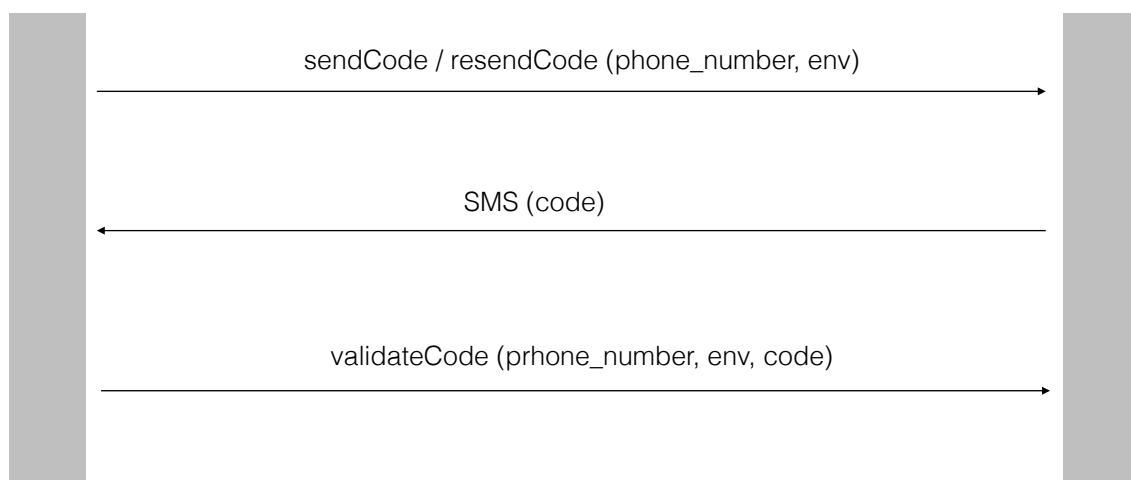
2.5   Command authentication

The authentication method used is specified by the standard IETF RFC 2717. The platform verifies all calls to the API Admin Interface before processing the command.

Both the username (username) and password must correspond with the resgitered account. These authentication data must be sent in the header of the HTTP request. Errors from incorrect authentication are described below.

Code example in PHP:

```php
$ch = curl_init($url);
curl_setopt($ch, CURLOPT_HTTPAUTH, CURLAUTH_BASIC);
curl_setopt($ch, CURLOPT_USERPWD, $username.':'.$password);
curl_setopt($ch, CURLOPT_POST, true);
curl_setopt($ch, CURLOPT_POSTFIELDS, 'XmlData='.$sms);
curl_setopt($ch, CURLOPT_RETURNTRANSFER, true);
curl_setopt($ch, CURLOPT_HEADER, true);
curl_setopt($ch, CURLOPT_TIMEOUT, 15);
$result = curl_exec($ch);
```

2.6   Response and HTTP errors

Any request or HTTP call will be verified by the platform. Whether the request is correct and if an error is found the HTTP status code will be returned. A HTML version of the HTTP error would be returned in the body of the response.

Here is the complete list of HTTP status response codes.

Code	Description
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

3   sendCode command

Este comando permite crear una código de verificación para un número y entorno determinados.

URL: `https://api.labsmobile.com/otp/sendCode`

3.1   Parameters

Name	Description
phone_number	Required. Mobile phone number to verify. It must include the country code without '00' or '+'.
env	Optional (‘’ by default). Environment where this request is framed. The same number can be validated in multiple environments.
message	Optional (‘The code to verify your phone number is %CODE%’ by default). The text must contain the variable %CODE% that will be replaced with the validation code.
sender	Optional (‘NumCHECK’ by default)

Example:

```
    https://api.labsmobile.com/otp/sendCode?
phone_number=3309002254&env=appNew&message=The+code+to+verify+your
+user+account+is+%25CODE%25&sender=appNew
```

3.2   Request

A request to *sendCode* generates a new code for a mobile number (*phone_number*) and environment. The platform will send a SMS message to the recipient number with the validation code.

IMPORTANT: All previous pending codes for this number and environment will be cancelled. The only valid code will be the last sent/requested.

3.3   Response

This command returns 1 if the request is processed succesfully. The platform will generate the code and sent the SMS message to the recipient number.

If any error is detected the corresponding HTTP status will be returned.

4   resendCode command

This command allows to send a validation message to a number and environment.

URL: https://api.labsmobile.com/otp/resendCode

4.1   Parameters

Name	Description
phone_number	Required. Mobile phone number to verify. It must include the country code without '00' or '+'.
env	Optional ('' by default). Environment where this request is framed.
message	Optional ('The code to verify your phone number is %CODE%' by default). The text must contain the variable %CODE% that will be replaced with the validation code.
sender	Optional ('NumCHECK' by default)

Example:

```
     https://api.labsmobile.com/otp/resendCode?
phone_number=3309002254&env=appNew&message=The+code+to+verify+your
+user+account+is+%25CODE%25&sender=appNew
```

4.2   Request

A request to *sendCode* sends a SMS message to the recipient number with the validation code.

IMPORTANTE: If there is no pending validation code for the requested number and environment a new one will be generated.

4.3   Response

This command returns 1 if the request is processed succesfully. The platform will sent the SMS message to the recipient number. And a new code will be generated if there were any pending earlier.

If any error is detected the corresponding HTTP status will be returned.

5 validateCode command

This command is used to validate a code for a certain number and environment.

URL: https://api.labsmobile.com/otp/validateCode

5.1 Parameters

Name	Description
phone_number	Required. Mobile phone number to verify. It must include the country code without '00' or '+'.
code	Required. Code to validate. Format: XXXXXX alphanumeric.
env	Optional ('' by default). Environment where this request is framed.

Example:

        https://api.labsmobile.com/otp/validateCode?
phone_number=3309002254&env=appNew&code=E32SWH

5.2 Request

A request to *validateCode* checks the code for the requested number and environment.

5.3 Response

This command will return 1 if the code is correct to validate the number and environment. Otherwise it returns 0.

If any error is detected the corresponding HTTP status will be returned.

6   checkCode command

This command is used to check the status of the validation process for a particular code corresponding to a specific number and environment.

URL: `https://api.labsmobile.com/otp/checkCode`

6.1 Parameters

Name	Description
phone_number	Required. Mobile phone number to verify. It must include the country code without '00' or '+'.
env	Optional ('' by default). Environment where this request is framed.

Example:

```
https://api.labsmobile.com/otp/checkCode?
phone_number=3309002254&env=appNew
```

6.2 Request

A request to *checkCode* returns the status of the validation process.

6.3 Response

This command will return 1 if the code has been validated. However if the code is pending for validation will return 0. If there is no code (validated or pending) will not return anything ('').

If any error is detected the corresponding HTTP status will be returned.

7 getEnvList command

This command queries all environments created by an account.

URL: `https://api.labsmobile.com/otp/getEnvList`

7.1 Parameters

This command has no parameters.

Example:

`https://api.labsmobile.com/otp/getEnvList`

7.2 Request

A request to *getEnvList* returns the set of environments created by the account that generated the request.

7.3 Response

This command will return the list of environments in JSON format.

Example:

`{"appNew", "appNew2", "envEx"}`

If any error is detected the corresponding HTTP status will be returned.

8 getEnv command

This command returns all codes of an environment.

URL: https://api.labsmobile.com/otp/getEnv

8.1 Parameters

Name	Description
env	Optional ('' by default). Environment where this request is framed.

Example:
> https://api.labsmobile.com/otp/getEnv?env=appNew

8.2 Request

A request to *getEnv* returns the set of codes created within an environment.

8.3 Response

This command will return the list of codes in JSON format in the following format:

> <phone_number, status, created, validated>

Example:
[{"3309002254", "1", "2016-01-03 12:32:08", "2016-01-03 12:34:40"},
 {"3306717278", "2", "2016-01-05 12:32:10", "2016-01-06 23:22:52"}]

If any error is detected the corresponding HTTP status will be returned.