MOBICODE - API

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Introduction

MobiCode API version 2.0 allows your applications to communicate directly with the MobiCode™ server. You can now order unlock codes, check if an order has been delivered, load your order history, and much more, directly from your own website, without having to log in on MobiCode.com.

You can integrate the API in your front office, like an unlocking website, to place directly your customers' orders on the MobiCode server, as well as in your back office, to cancel or retry orders, or to request a code verification.

To deliver unlock codes to your customers, you have the choice to parameter your default delivery emails on the MobiCode website, or to use a back office or a cron job to periodically check if a specific order has been delivered, and act accordingly.

The API is XML-based, platform-independent, and can be integrated on any OS in any programming language.

Please note that this API is intended to be used with the IMEI service only, and does not permit to control other services like cable servers or file servers.

Creating API key

Please log in on http://www.mobi-server.com, then click on the "XML API" in the menu. If you have already created your API key, it is displayed here. If not, just click on the "Generate API key" button. This key, just as your MobiCode password, must be kept secret. For security purposes, you can regenerate it at any moment. Please note that in this case, any key previously generated will instantly become inactive!

Technical Information

The API is located at http://www.mobi-server.com/xml/api/v2/interface.php

All gueries are sent via the HTTP POST method.

All exchanges with the API are encoded in UTF-8.

The server returns an easy-to-read XML stream.

The different services provided by the API are identified as Actions.

All API queries must be sent with at least two parameters: -

• Key: your MobiCode API key

Action: the service requested.

Other parameters will be required for certain services, please read the detailed information for each Action.

API Calls, Data & Local Data Storage

Some Data (tools, models, networks etc) infrequently change, it is suggested that this information is stored locally, and checked and updated once a day, for example by a script set to run on a cron script.

This will result in a faster experience for your users.

XML Stream Format

The XML stream always conforms to this template:

This makes XML parsing easy. We provide a PHP 4/5 library, that automatically parses this stream for you. You can obviously use any other XML parser in any programming language.

If an error occurs anywhere in the API, a single <Error> tag will be shown:

XML Structure is further detailed in each Action description.

Possible Errors Include

<Tag> Value <SubTag> ...

```
1001 => 'failed authentication'
1002 => 'wrong password for username'
1003 => 'user_id not known'
1004 => 'account not authorised for API access - or API key not correct'
1005 => 'no authentication data contained in xml request'
1006 => 'requested action not recognised - '
1007 => 'no action requested'
1008 => 'no valid service set in request'
1009 => 'NO Data Received, unable to parse received request'
1010 => 'requested service not active on account'
1011 => 'service not correct type for this api (cable service required)'
1012 => 'insufficient credits for requested service'
1013 => 'Subscription Expired - Renew Your Subscription'
1014 => 'Account Suspended - Contact Admin'
1015 => 'Invalid Data Received'
```

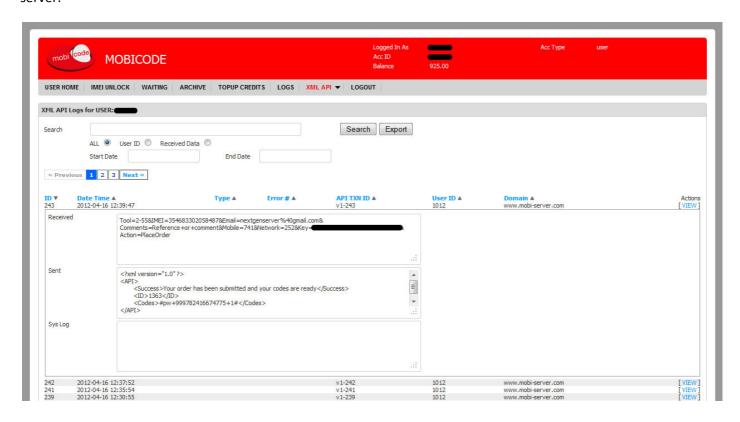
- 1016 => 'No Orders Found For Filters Provided'
- 1017 => 'No Networks Found Or Required For This Service'
- 1018 => 'NO Valid IMEI in Request'
- 1019 => 'Network ID not recognised for this product'
- 1020 => 'Mobile ID not recognised for this product'

API Logging

Full logging of API for your account is available to view by logging into http://www.mobi-server.com and selecting "XML API" -> "API LOGS"

Logs are kept for a period of 4 weeks.

Providing a valid API key for your account was found in the request then the API request and response will be logged within your account, allowing you to see the information received by the server and sent back in response by the server.



The PHP4/5 library

For quicker integration into your PHP applications, we provide an easy to use PHP library.

Prerequisites

- You must have PHP4 or PHP5 installed on your system. Older versions are deprecated and not supported.
- You need to have the cURL library installed. There are very good chances that this library is already installed
 on your system; if not, you can ask your system administrator or hosting company to do it for you. To check if
 you have cURL installed, please just try to execute the api.php file under your hosting environment. If the
 cURL extension is missing, the MobiCode library will complain about this.

Configuration

1. Please open the api.php file first, and locate this line:

```
define('MOBICODE_API_KEY', '(XXXX-XXXX-XXXX-XXXX)');
```

And replace the X's with your API key (see "Creating my API key" above), for example : define(MOBICODE_API_KEY', '(0123-4567-89AB-CDEF)');

2. If you're currently debugging your application, and something goes wrong with the API, you can change this line: define(MOBICODE_API_DEBUG', false);

to:

define(MOBICODE_API_DEBUG', true);

The API will now be verbose on errors encountered, if any. You should however set this parameter to false in production mode, to avoid showing potential error details to your end users (or just disable error displaying in the PHP configuration; this is a standard PHP security practice).

Available Functions

All functions are encapsulated into a static class named 'MobiCode'. You can call each of these functions statically, without having to instantiate an object. The detail of each function is shown in the following page.

Examples

We provide a set of examples for each service (Action) in the zip archive. Please have a look at each of these examples for a better understanding of the services!

			Page.
Function MobiCode::CallAPI() /* Example */ php echo N</td <td>Parameters String \$Action [Array \$Parameters] MobiCode::CallAPI ('Account)</td> <td>Return value A string containing the XML stream returned by the MobiCode server, Or false if an error occurs. Info'); ?></td> <td>Description Make a call to the MobiCode API, with the specified service (Action) and zero or more parameters, and return the result.</td>	Parameters String \$Action [Array \$Parameters] MobiCode::CallAPI ('Account)	Return value A string containing the XML stream returned by the MobiCode server, Or false if an error occurs. Info'); ?>	Description Make a call to the MobiCode API, with the specified service (Action) and zero or more parameters, and return the result.
Function MobiCode::ParseXML() /* Example */ php print_</th <th>Parameters String \$XML r (MobiCode::ParseXML (Mo</th> <th>Return value An associative array representing the XML information parsed, Or false if an error occurs. bbiCode::CallAPI ('AccountInf</th> <th>Description Parse an XML stream returned by the MobiCode API, and return the result as a comprehensive associative array.</th>	Parameters String \$XML r (MobiCode::ParseXML (Mo	Return value An associative array representing the XML information parsed, Or false if an error occurs. bbiCode::CallAPI ('AccountInf	Description Parse an XML stream returned by the MobiCode API, and return the result as a comprehensive associative array.
Function MobiCode::CheckIMEI() /* Evample */ php yar di</td <td>Parameters String \$IMEI Bool \$Checksum</td> <td>Return value A boolean value, whether the IMEI number validates or not.</td> <td>Description Check if the IMEI number (serial number) of a mobile phone is valid. Setting \$Checksum to true (default) validates it against the standard checksum algorithm. In most of the cases, but not all unfortunately (certain brands fail to comply with the standards), an IMEI that fails to validate will always result in an unavailable code. It's up to you to choose whether to use the checksum or not, for example to warn the user before he submits an IMEI.</td>	Parameters String \$IMEI Bool \$Checksum	Return value A boolean value, whether the IMEI number validates or not.	Description Check if the IMEI number (serial number) of a mobile phone is valid. Setting \$Checksum to true (default) validates it against the standard checksum algorithm. In most of the cases, but not all unfortunately (certain brands fail to comply with the standards), an IMEI that fails to validate will always result in an unavailable code. It's up to you to choose whether to use the checksum or not, for example to warn the user before he submits an IMEI.
–			
Function MobiCode::CheckEmail ()	Parameters String \$Email	Return value A boolean value, whether the email address validates or not.	Description Check if an email address will be accepted by the API, before submitting it.
/* Example */ php var_d</td <td>ump (MobiCode::CheckEmail</td> <td>('user@example.com')) ; ?</td> <td>></td>	ump (MobiCode::CheckEmail	('user@example.com')) ; ?	>
Function MobiCode::CheckProvide rID ()	Parameters String \$ProviderID	Return value A boolean value, whether the provider ID validates or not.	Description Check if an Alcatel provider ID will be accepted by the API, before submitting it, for tools where Requires.Provider is True.

/* Example */ <?php var_dump (MobiCode::CheckProviderID ('E221X-2ABCDE1')) ; ?>

API Services

In the MobiCode API, the services are named Actions. Each "Action" allows your application to perform a specific task: load a list of mobile phones, place an order, etc.

Here is an exhaustive list of the actions:

Action	Description
Accountinfo	Returns information on the MobiCode account associated with the
	current API key
GetMobiles	Returns a list of supported mobile phones
GetNetworks	Returns a list of mobile phone networks
GetTools	Returns a list of supported unlock tools
GetToolMobiles	Returns a list of mobiles phones supported by a particular unlock tool
GetToolNetworks	Returns a list of mobile phone carriers supported by a particular
	unlock tool
GetOrders	Returns a list of unlock codes ordered on the MobiCode account
PlaceOrder	Order an unlock code
CancelOrder	Cancel an order waiting for delivery
RetryOrder	Retry an order delivered and unavailable
VerifyOrder	Verify an unlock code delivered

The following pages detail these actions.

All dates and times in the API are in the UTC time zone.

AccountInfo

DESCRIPTION

Returns information on the MobiCode account associated with the current API key.

PARAMETERS

None.

XML STREAM FORMAT

This is an example. Real data will be different.

<API>

<Email>user@example.com</Email>

<Credits>0.00</Credits>

<Currency>GBP</ Currency>

<Server.Time>2008-12-01 16:30:45 </Server.Time>

</API>

Field	Description	Visibility	Туре
Email	Email address of the account	Always	String
Credits	Credits currently available on the account	Always	Numerical value, with two decimals
Currency	Currency of the account	Always	String (3 chars)
Server.Time	Date and time of the MobiCode server	Always	YYYY-MM-DD HH:MM:SS

GetMobiles

DESCRIPTION

Returns a list of supported mobile phones, sorted by brand.

PARAMETERS

None.

XML STREAM FORMAT

This is an example. Real data will be different.

Field	Description	Visibility	Туре
Brand : ID	Brand ID	Always	Digits
Brand : Name	Brand name	Always	String
Mobile : ID	Mobile phone ID	Always	Digits
Mobile : Name	Mobile phone name	Always	String
Mobile : Photo	URL of a 120x120 pixels picture of the mobile phone	Only if a photo is available	String

GetNetworks

DESCRIPTION

Returns a list of mobile phone networks, sorted by country.

PARAMETERS

None.

XML STREAM FORMAT

This is an example. Real data will be different.

Field	Description	Visibility	Туре	
Country: ID	Country ID	Always	Digits	
Country : Name	Country Name	Always	String	
Network : ID	Network ID	Always	Digits	
Network : Name	Network Name	Always	String	

GetTools

DESCRIPTION

Returns a list of supported unlock tools, sorted by group.

PARAMETERS

None.

XML STREAM FORMAT

This is an example. Real data will be different.

```
<API>
       <Group>
              <ID>8</ID>
              <Name>United Kingdom networks</Name>
              <Tool>
                     <ID>1</ID>
                     <Name>Vodafone United Kingdom</Name>
                     <Credits>6.00</Credits>
                     <SMS>True</SMS>
                     <Message>Information message</Message>
                     <Delivery.Min>1</Delivery.Min>
                     <Delivery.Max>2</Delivery. Max >
                     <Delivery.Unit>Day</Delivery. Unit >
                     <Requires.Network>None</Requires.Network>
                     <Requires.Mobile>None</Requires.Mobile>
                     <Requires.Provider>None</Requires.Provider>
                     <Requires.PIN>None</Requires.PIN>
                     <Requires. KBH >None</Requires.KBH>
                     <Requires. MEP >None</Requires.MEP>
                     <Requires. PRD >None</Requires.PRD>
                     <Requires.Type>None</Requires.Type>
                     <Requires.Locks>0</Requires.Locks>
              </ Tool> ...
       </ Group> ...
</API>
```

Field	Description	Visibility	Туре
Group : ID	Group ID	Always	Digits
Group : Name	Group name	Always	String
Tool : ID	Unlock tool ID	Always	Digits
Tool : Name	Unlock tool name	Always	String
Tool : Credits	Cost of an unlock code on	Always	Numerical value, with two
	this service in credits		
Tool : SMS	Whether or not the code	Always	True False
	can be delivered by SMS		
Tool : Message	Information message for	Only if a message is	String
	this tool (provider	available	

	holidays, etc.)		
Tool : Delivery.Min	Lower limit for delivery time	Only if the value is relevant and available	Digits
Tool : Delivery.Max	Upper limit for delivery time	Only if the value is relevant and available	Digits
Tool : Delivery.Unit	Delivery time unit	Always	Hour Day Instant Unknown
Tool : Requires.Network	Whether or not the tool needs the original network on which the phone is locked	Always	None Optional Required
Tool : Requires.Mobile	Whether or not the tool needs the model of the locked mobile phone	Always	None Optional Required
Tool : Requires.Provider	Whether or not the tool needs the Provider ID(1) of the locked mobile phone	Always	None Optional Required
Tool : Requires.PIN	Whether or not the tool needs the PIN(2) of the locked mobile phone	Always	None Optional Required
Tool : Requires.Type	Whether or not the tool needs the Type(3) of the locked mobile phone	Always	None Optional Required
Tool : Requires.KBH	Whether or not the tool needs the KBH(4) of the locked mobile phone	Always	None Optional Required
Tool : Requires.MEP	Whether or not the tool needs the MEP(5) of the locked mobile phone	Always	None Optional Required
Tool : Requires.PRD	Whether or not the tool needs the PRD(5) of the locked mobile phone	Always	None Optional Required
Tool : Requires.Locks	Means how many locks(6) the tool is waiting for. 0 for "no lock required"	Always	Digits [0-5]

- (1) Provider ID: 13-chars code printed on the sticker located under the battery on Alcatel phones Format: XXXXX-XXXXXXX
- (2) PIN: 8-chars alphanumeric ID of BlackBerry phones. Select Options > Status to get it on the phone. This is not the PIN code of the SIM card!
- (3) Type: type *#0000# on the phone keyboard to find this information.
- (4) KBH : to find this information on the phone, type \rightarrow * \leftarrow * then go to "Service info", "Configurations"
- (5) MEP/PRD : please check MobiCode to find where to get this information on the phone. Format : MEP-XXXXX-XXX / PRD-XXXXXX-XXX (X are numbers)
- (6) Locks: Locks requested for SonyEricsson phones. Must be chosen among: NCK, NSCK, SPK, CCK, and ESL.

GetToolMobiles

DESCRIPTION

Returns a list of mobiles phones supported by a particular unlock tool.

Only relevant if the Requires. Mobile parameter of the unlock tool is Optional or Required.

PARAMETERS

Parameter	Description	Required	Type
ID	Unlock tool ID	Yes	Digits

XML STREAM FORMAT

This is an example. Real data will be different.

Field	Description	Visibility	Туре
Mobile : ID	Mobile phone ID	Always	Digits
Mobile : Name	Full name of the mobile phone & Brand (Brand Model)	Always	String
Mobile : Brand	Full name of the mobile brand (Brand)	Always	String
Mobile : Model	Full name of the mobile phone model (Model)		

GetToolNetworks

DESCRIPTION

Returns a list of the mobile phone carriers supported by a particular unlock tool.

Only relevant if the Requires. Network parameter of the unlock tool is Optional or Required.

PARAMETERS

Parameter	Description	Required	Туре
ID	Unlock tool ID	Yes	Digits

XML STREAM FORMAT

This is an example. Real data will be different.

Field	Description	Visibility	Туре
Network : ID	Mobile phone carrier ID	Always	Digits
Network : Name	Full name of the carrier (Operator & Country)	Always	String
Network : Country	Full name of the Country the carrier is from (Country)	Always	String
Network : Network	Name of the Carrier Only (Carrier)	Always	String

GetOrders

DESCRIPTION

Returns a list of unlock codes ordered on the MobiCode account.

By default, returns all of the orders if no parameter is sent.

The parameters allow you to search the history.

PARAMETERS

Parameter	Description	Required	Туре
Status	Status of the order	No	Waiting Delivered Canceled
Available	Whether the code is available	No	True False
	(implies Status=Delivered)		
Tool	Unlock tool ID	No	Digits
Mobile	Mobile phone ID	No	Digits
Network	Mobile phone original network ID	No	Digits
IMEI	Mobile phone IMEI	No	Digits (15)
ID	Order number	No	Digits
DateFrom	Order date lower limit	No	YYYY-MM-DD YYYY = Year on 4 digits
			MM = Month on 2 digits DD = Day on 2
			digits
DateTo	Order date upper limit	No	YYYY-MM-DD
DeliveryFrom	Delivery date lower limit	No	YYYY-MM-DD
DeliveryTo	Delivery date upper limit	No	YYYY-MM-DD

XML STREAM FORMAT

This is an example. Real data will be different.

```
<API>
```

```
<Order>
```

<ID>123456</ID>

<Date>2008-10-15 14:30:00</Date>

<IMEI>0000000000000000/IMEI>

<Credits>6.00</Credits>

<Comments>Unlock code for Mike's phone</Comments>

<Tool>Vodafone United Kingdom</Tool>

<Tool.ID>1</Tool.ID>

<Status>Delivered</Status>

<Available>True</Available>

<Delivery>2008-10-16 18:15:45</Delivery>

<Mobile>Nokia N95</Mobile>

<Mobile.ID>2174</Mobile.ID>

<Codes>12345678</Codes>

<Verifiable>True</Verifiable>

</ Order> ...

</API>

Field	Description	Visibility	Туре
Order : ID	Order number	Always	Digits

Order : Date	Date and time of the order	Always	YYYY-MM-DD HH:MM:SS
Order : IMEI	Mobile phone IMEI number	Always	Digits (15)
Order : Credits	Cost of the order, in credits	Always	Numerical value, with two decimals
Order : Comments	Your comments about this order	If a comment has been leaved when the order was placed	String
Order : Tool	Name of the tool used	Always	String
Order : Tool.ID	ID of the tool used	Always	Digits
Order : Status	Status of the order	Always	Waiting Delivered Canceled
Order : Available	Whether the unlock code was available or not	If Status is Delivered	True False
Order : Delivery	Delivery date	If Status is Delivered	YYYY-MM-DD HH:MM:SS
Order : Mobile	Full name of the mobile phone (Brand Model)	If the phone has been specified when the order was placed	String
Order : Mobile.ID	ID of the mobile phone	If the phone has been specified when the order was placed	Digits
Order : Codes	Unlock code(s)	If Status is Delivered and Available is True	String
Order : Provider-ID	Provider ID of the phone	If the provider ID has been specified when the order was placed	String (13 chars)
Order : PIN	PIN of the phone	If the PIN has been specified when the order was placed	String (8 chars)
Order : KBH	KBH of the phone	If the KBH has been specified when the order was placed	String
Order : MEP	MEP of the phone	If the MEP has been specified when the order was placed	String
Order : PRD	PRD of the phone	If the PRD has been specified when the order was placed	String
Order : Type	Type of the phone	If the Type has been specified when the order was placed	String
Order : Locks	Locks requested	If the locks have been specified when the order was placed	Comma-separated values
Order : Retryable	Whether an unavailable order can be retried or not	If Status is Delivered and Available is False	True False
Order : Verifiable	Whether an available unlock code can be verified or not	If Status is Delivered and Available is True	True False

PlaceOrder

DESCRIPTION

Order an unlock code. Prior to ordering an unlock code, you must load the tool information (via GetTools), and check which parameters are required and send the correct parameters accordingly.

For **Mobile** & **Network** parameters, please check **GetMobiles**, **GetNetworks**, **GetToolMobiles**, **GetToolNetworks**. For a better description of other fields (**Provider**, **PIN**, **KBH**, **MEP**, **PRD**, **Type**, **Locks**), please see **GetTools**.

PARAMETERS

Parameter	Description	Required	Туре
Tool	ID of the unlock tool to be used	Yes	Digits
IMEI	Mobile phone IMEI number	Yes	Digits (15)
Email	Email of your customer, who will receive automated emails parameterized in your UnlockBase account settings	No	String
Comments	Your comments on this order (free field)	No	String
Mobile	Mobile phone ID	If tool's Requires. Mobile is Required; can also be set if Optional	Digits
Network	ID of the mobile network on which the phone is currently locked	If tool's Requires.Network is Required; can also be set if Optional	Digits
Provider	Provider ID of the phone	If tool's Requires.Provider is Required; can also be set if Optional	Digits (13)
PIN	PIN of the phone	If tool's Requires.PIN is Required; can also be set if Optional	String (8 chars)
КВН	KBH number of the phone	If tool's Requires.KBH is Required; can also be set if Optional	String
MEP	MEP number of the phone	If tool's Requires.MEP is Required; can also be set if Optional	String MEP-XXXXX-XXX X = digits
PRD	PRD number of the phone	If tool's Requires.PRD is Required; can also be set if Optional	String PRD-XXXXX-XXX X = digits
Туре	Type of the phone	If tool's Requires.Type is Required; can also be set if Optional	String
Locks	Locks requested for SonyEricsson tools. NCK, NSCK, SPK, CCK, ESL	If tool's Requires.Locks > 0 The number of locks requested must be equal to Requires.Locks	Comma-separated list
SMS	Mobile phone number (international format) of your customer, who will receive automated SMS parameterized in your UnlockBase account settings	No	+XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

XML STREAM FORMAT

This is an example. Real data will be different.

<API>

<Success> Your order has been submitted</Success> <ID>123456</ID>

</API>

Field	Description	Visibility	Туре
Success	Success message	If the order was successfully placed	String
ID	Order ID	If the order was successfully placed	Digits
Codes	Unlock code(s)	If the order was successfully placed, and the delivery is instantaneous (automated tools such as Nokia DCT)	String
Error	Error message	If the order could not be placed (wrong parameters, for example)	String