

XML API

Version 0.99.9

This guide outlines Phone.com's XML API – a powerful interface that allows advanced users to programmatically interface with Phone.com's systems.

Quick Start

API requests are sent as a query string of key-value pairs via HTTPS (secure) GET or POST.

Responses are sent in simple XML.

Commands sent to the development environment appear as follows:

```
https://dev.tierra.net/special/xmlapi?username=XXX&password=XXX&action=XXX&...
```

Commands sent to the production environment appear as follows:

```
https://control.phone.com/special/xmlapi?  
username=XXX&password=XXX&action=XXX&...
```

General information

Unless you make special arrangements for IP-based or other authentication, each command must be properly authenticated using the account's username and password. Failure to provide correct authentication information, or attempting to manage a domain or service that does not correspond to a particular account, will result in an error.

You must contact Phone.com to activate the API on your account.

Each command response will contain a result tag which indicates the success or failure of the command:

```

<result status="ok">
  <msg>Success message</msg>
  <resultDate>YYYY-MM-DDTHH:MM:SS.0000Z</resultDate>
</result>

<result status="error">
  <msg>Error message</msg>
  <resultDate>YYYY-MM-DDTHH:MM:SS.0000Z</resultDate>
</result>

```

Each command response will contain a unique server transaction ID (svTRID), and will reflect back an optional client transaction ID (clTRID) if it was provided on input:

```

<trID>
  <clTRID>1234</clTRID>
  <svTRID>12345678</svTRID>
</trID>

```

Commands returning data (for example, commands querying information) will place that information in a resultData tag. Here is an overall example of a command and response:

<https://control.phone.com/special/xmlapi?username=joesmith&password=w00t&action=getVoiceList&clTRID=1234>

```

<response>
  <resultData>
    <voice-list>
      <voice id="141">
        <name>Dubya</domainName>
        <language>English</language>
        <dialect></dialect>
        <sex>male</sex>
      </voice>
      <voice id="142">
        <name>Princess</domainName>
        <language>English</language>
        <dialect>whiney teenager</dialect>
        <sex>female</sex>
      </voice>
    </voice-list>
  </resultData>
  <result status="ok">
    <msg>Command completed successfully</msg>
    <resultDate>2007-12-01T13:28:50.0000Z</resultDate>
  </result>
  <trID>
    <clTRID>1234</clTRID>
    <svTRID>12059333301172688600</svTRID>
  </trID>
</response>

```

Caveats

Please remember to URL encode (“escape”) all input passed via the query string. For example, to pass the name “John Smith” in the query string, you will need to pass John+Smith or John%20Smith. Common tools are available in many environments to make this easy.

We recommend parsing the XML response using an Xpath-style parser. Order of data in the response is not guaranteed.

XML API Command Reference

createAccount

Create a new account

Input:

newUsername	required	the requested username
newPassword	required	the requested password
name	required	name
company	optional	company name
address	required	address
address2	optional	address line 2
city	required	city
state	optional	state (required for US, CA)
zip	optional	zip (required 5 or 9 digit for US)
country	required	2-character country abbreviation
phone	required	phone number
fax	optional	fax number
email	required	email
email2	optional	alternate email address
masterid	optional	assigned by Phone.com
brandingid	optional	assigned by Phone.com
code	optional	service code requested - assigned by Phone.com
phoneNumber	optional	desired telephone number – if applicable
username	required	<i>username</i>
password	required	<i>password</i>
action	required	createAccount
clTRID	optional	client transaction ID

This command creates a new account based on the supplied parameters

cancelAccount

Cancel an existing account

Input:

username	required	<i>username</i>
password	required	<i>password</i>
accountUsername	required	the username of the account to cancel

action	required	getPhoneNumberList
clTRID	optional	client transaction ID

This command will cancel the account specified in “accountUsername”. Note that the following restrictions apply: (1) you must specify the username & password of your **master** account (one that is authorized to act on the account specified in “accountUsername”); (2) an account may not be cancelled which has any active devices, nor any pending orders, shipments, outstanding porting requests, DID backorders, or other similar pending activity.

getPhoneNumberList

Obtain a list of phone numbers on the account.

Input:

username	required	<i>username</i>
password	required	<i>password</i>
action	required	getPhoneNumberList
clTRID	optional	client transaction ID

This command returns a list of active phone numbers on the account. The result includes the id, number, nickname, and rate center (if applicable):

```
<response>
<resultData>
<phoneNumberList>
<phoneNumber id="19676">
<phoneNumber>+18668252541</phoneNumber>
<nickName>My Nickname</nickName>
<rateCenter/>
</phoneNumber>
...
<phoneNumber id="72354">
<phoneNumber>+12542958368</phoneNumber>
<nickName>My Nickname</nickName>
<rateCenter>WACO_TX</rateCenter>
</phoneNumber>
</phoneNumberList>
</resultData>
<result status="ok">
<msg>Command completed successfully</msg>
<resultDate>2011-03-02T19:51:32.0000Z</resultDate>
</result>
<trID>
<clTRID/>
<svTRID>12990954922162961333</svTRID>
</trID>
</response>
```

getCallList

Obtain a list of call logs

Input:

username	required	<i>username</i>
password	required	<i>password</i>
action	required	getCallList
startTime	optional	range start (unix epoch time)

endTime	optional	range end (unix epoch time)
clTRID	optional	client transaction ID

This command returns a list of call detail records for the account. The result includes the id, start time, caller ID, called number, and duration in seconds. If applicable, the result may also include final action, final action duration, listen URL, and/or transcription. Return rows are limited to 500. We recommend using startTime and endTime to limit the result set as needed.

```
<response>
<resultData>
<callList>
<call id="105900">
<startTime gmt="2009-10-27T21:42:15.0000Z">1256679735</startTime>
<callerId>+19735678323</callerId>
<calledNumber>+16247688421</calledNumber>
<duration>52</duration>
<finalAction>queue 61</finalAction>
<url/>
</call>
<call id="5225979">
<startTime gmt="2009-10-27T21:43:12.0000Z">1256679792</startTime>
<callerId>+19745726313</callerId>
<calledNumber>+15237281411</calledNumber>
<duration>22</duration>
<finalAction>queue 43</finalAction>
<url/>
</call>
</callList>
</resultData>
<result status="ok">
<msg>Command completed successfully</msg>
<resultDate>2011-03-02T20:06:03.0000Z</resultDate>
</result>
<trID>
<clTRID/>
<svTRID>12990963632163045186</svTRID>
</trID>
</response>
```

originateCall

Setup a new call

Input:

username	required	<i>username</i>
password	required	<i>password</i>
action	required	originateCall
legAPhoneNumber	required	DID to call first – E.164 format or extension number
legACallerId	optional	The caller ID to send when placing the call to leg A
legATimeout	optional	(defaults to legBPhoneNumber) number of seconds (default 20)
legBPhoneNumber	required	DID to call second – E.164 format
legBCallerId	optional	The caller ID to send when placing the call to leg B
clTRID	optional	client transaction ID

This command places a call to the leg A DID (or to the leg A extension number). If that number answers within the leg A timeout, then the A leg will be connected to the B leg DID. Leg A's DID (or caller ID) will be used as the Caller ID when calling leg B, and vice versa.

updateCallHandlingSimpleRingAll

Updates the call handling on an existing phone number – **Simple Version**

Input:

username	required	<i>username</i>
password	required	<i>password</i>
action	required	updateCallHandlingSimpleRingAll
phoneNumber	required	phone number on which to perform the action – E.164
destination1	required	DID to call – E.164 format or extension number
destination1VoiceTag	optional	Voice tag to use for destination1
destination1Screening	optional	Enable screening for destination1 (yes/no)
destination1CallerId	optional	Caller ID when calling destination1
...		
destination10	optional	DID to call – E.164 format or extension number
destination10VoiceTag	optional	Voice tag to use for destination10
destination10Screening	optional	Enable screening for destination10 (yes/no)
destination10CallerId	optional	Caller ID when calling destination10
timeout	optional	Number of seconds to ring all numbers (default 60 seconds)
clTRID	optional	client transaction ID

This function updates the call handling rules for an existing phone number. This function will setup the phone number to ring up to 10 phone numbers simultaneously for up to timeout seconds. Each destination number can specify whether screening should be used, a voice tag to use, and a caller ID to use when dialing that destination. If caller ID is not provided, the caller's ID will be used.

Note: this function will completely replace the call handling rules for an existing phone number.

updateExtensionNotification

Updates the notification settings for an extension

Input:

username	required	<i>username</i>
password	required	<i>password</i>

action	required	updateExtensionNotification
extension	required	numeric extension
enableEmail	optional	send email notifications? yes/no
enableSms	optional	send SMS notifications? yes/no
emailAddress	optional	email address to send notifications to
emailFormat	optional	format for voicemail (wav/mp3)
smsNumber	optional	SMS number to send notifications to – E.164
clTRID	optional	client transaction ID

This function updates the notification settings for an extension. Existing settings are retained for all settings that are not provided at the time of the API call.

SMS

Phone.com supports SMS send with the following conditions:

- (1) The “from” (source) phone number is a Phone.com number within your account. It is not possible to send SMS from an “off-net” phone number, or from a phone number that is not on your Phone.com account.
- (2) The “to” (destination) phone number is a US domestic cell phone number. Certain international destinations are also supported.

Please note that SMS messages are limited to 160 characters in length. Longer messages may be truncated or converted into multi-part messages at additional cost.

Please remember to send phone numbers in E.164 format, e.g. +18585602222.

sendSMS

Sends an SMS

username	required	<i>username</i>
password	required	<i>password</i>
action	required	sendSMS
fromNumber	required	the E.164 phone number to send the SMS
FROM		
toNumber	required	Note you must encode the + as %2B the E.164 phone number to send the SMS TO Note you must encode the + as %2B
message	required	URL-encoded message. Limited to 160
characters		
clTRID	optional	client transaction ID

EXAMPLE

https://control.phone.com/special/xmlapi?
username=****&password=****&action=sendSMS&fromNumber=
%2B15802820001&toNumber=%2B18583807710&message=This+is+a+test

RESULT

```
<response>  
  <result status="ok">  
    <msg>Command completed successfully</msg>  
    <resultDate>2010-08-19T04:21:54.0000Z</resultDate>  
  </result>  
  <trID>  
    <clTRID/>  
    <svTRID>12821917141082580761</svTRID>  
  </trID>  
</response>
```

PHONE NUMBER SEARCH & RESERVATION

Telephone numbering is a relatively complicated topic. Each country has its own numbering policies, and the United States is no exception. In order to reduce the complexities involved with number search, Phone.com organizes its inventory based on the following assumptions, and provides APIs to search inventory by any of the following conditions:

- All phone numbers belong to exactly one country code. Example: the number 1212444555 belongs to the country code 1 (United States); the number 441133506121 belongs to the country code 44 (United Kingdom)
-
- Phone numbers are either toll-free or not. "Toll-free" means toll-free to the calling party, with certain exceptions and exclusions. In the US, toll-free numbers start with 1800, 1888, 1877, 1866, or 1855.
-
- Phone numbers belong to exactly one state. For non-US countries, the state may be "National". Example: the number 1212444555 belongs to the state "NY"; the number 18585608120 belongs to the state "CA".
-
- In the US, phone numbers belong to one or more prefixes (i.e. area codes). Note that due to area code overlays, a number like "12124445555" actually belongs to several area codes (212, 646, 718, 845, 914, 917). This technicality is key to understanding the US numbering scheme. To find numbers that are within the same geography as the 212 area code, search based on the "212" *prefixes*. But to find numbers that start with 212, you will search based on the *pattern* 1212*****.
-
- Phone numbers belong to exactly one region (i.e. city). In some countries, the region is simply "National". Note that "region" is a general term for a geography (think "large city"). For example, "San Diego" is a region which

- encompasses dozens of different localities.
-
- In the US, phone numbers belong to a locality (technically a “rate center”). We have found that most customers are only concerned with their area code and/or region (e.g. "San Diego"), and not with locality (e.g. "Poway" or "Rancho Bernardo"), so we recommend limiting most searches to region, and not drilling down to rate center. Because this search exposes users to the underlying complexities of the North American Numbering Plan, Phone.com considers this an "Advanced Search" option, not appropriate for most users.

getPhoneNumberCountryList

Returns a list of supported country codes & country names.

username	required	<i>username</i>
password	required	<i>password</i>
action	required	getPhoneNumberCountryList
clTRID	optional	client transaction ID

getPhoneNumberPrefixList

Returns a list of supported prefixes (area codes) for a given countryCode, and approximate inventory quantity available. This is a list of *supported* prefixes, although inventory may or may not be available. Note that due to area code "splits", multiple area codes often serve the same region; all such area codes will be listed even though a specific area code may be "full".

username	required	<i>username</i>
password	required	<i>password</i>
action	required	getPhoneNumberPrefixList
countryCode	required	country code to search
clTRID	optional	client transaction ID

getPhoneNumberStateList

Returns a list of supported states for a given countryCode, and approximate inventory quantity available. This is a list of *supported* states, although inventory may or may not be available.

username	required	<i>username</i>
password	required	<i>password</i>
action	required	getPhoneNumberStateList
countryCode	required	country code to search
clTRID	optional	client transaction ID

getPhoneNumberRegionList

Returns a list of supported regions (i.e. cities) for a given prefix or state, and the

inventory availability within each.

username	required	<i>username</i>
password	required	<i>password</i>
action	required	getPhoneNumberRegionList
countryCode	required	country code to search
prefix	optional	prefix to search
state	optional	state to search
Note: one of prefix or state must be specified		
clTRID	optional	client transaction ID

getPhoneNumberLocalityList

Returns a list of supported rate centers (i.e. localities) for a given prefix or state, and the inventory availability within each.

username	required	<i>username</i>
password	required	<i>password</i>
action	required	getPhoneNumberLocalityList
countryCode	required	country code to search
prefix	optional	prefix to search
state	optional	state to search
Note: one of prefix or state must be specified		
clTRID	optional	client transaction ID

getPhoneNumberInventory

Returns a list of phone numbers in inventory for a given state, prefix, region, locality, or pattern, and their associated "friendly format", monthly fee ("cost"), and premium setup fee (where applicable). When type=TF (toll-free) and a pattern is provided, this merges real-time search results from SMS/800, but note that real-time results from SMS/800 are limited to 10 at a time, and will be randomized. Pattern may include digits, letters A-Z, or "*".

username	required	<i>username</i>
password	required	<i>password</i>
action	required	getPhoneNumberInventory
countryCode	required	country code to search
type	optional	restrict search to "TF" (toll-free) or "local"
state	optional	restrict search to this state
region	optional	restrict search to this region (if so, state is required)
locality	optional	restrict search to this locality (if so, state is required)
prefix	optional	restrict search to this area code
pattern	optional	pattern restriction
quantity	optional	return this many results; will not return more than 500

page	optional	skip to the next page of results (quantity is required)
clTRID	optional	client transaction ID

getPhoneNumberPortingEligibility

Determines whether a phone number is eligible for porting into our system. Returns Yes or No.

username	required	<i>username</i>
password	required	<i>password</i>
action	required	getPhoneNumberPortingEligibility
phoneNumber	required	full phone number, e.g. 18585608120
clTRID	optional	client transaction ID

addPhoneNumber

Add a specific phone number into the account. This will take a single phone number from Phone.com's spare phone number inventory and add it to the Phone.com account, at which point it will become available for administration via the Phone.com UI (and via other API commands).

Note that this command is not compatible with backorders or LNPs and is designed only to add numbers which exist in inventory that are unused (or potentially reserved, see below).

username	required	<i>username</i>
password	required	<i>password</i>
action	required	addPhoneNumber
phoneNumber	required	full phone number, e.g. 18585608120
clTRID	optional	client transaction ID

reservePhoneNumber

Reserve a phone number for up to 24 hours. This will remove the number from search results, both as returned from the API, and on the Phone.com UI. Note that Phone.com establishes a limit on the quantity of numbers that can be reserved by an individual API user, so use this operation sparingly. Note this operation is intended to be used AFTER you have an order, but BEFORE you confirm the order (and thus BEFORE you submit the order to Phone.com).

Phone numbers will be reserved until approximately midnight pacific time, and then will be automatically unreserved.

username	required	<i>username</i>
password	required	<i>password</i>
action	required	reservePhoneNumber
phoneNumber	required	full phone number, e.g. 18585608120
clTRID	optional	client transaction ID

unreservePhoneNumber

Return a phone number to inventory

username	required	<i>username</i>
password	required	<i>password</i>
action	required	unreservePhoneNumber
phoneNumber	required	full phone number, e.g. 18585608120
clTRID	optional	client transaction ID

CHATCALLS (formerly PHONE DOTs)

getVoiceList

List available voices

Input:

username	required	<i>username</i>
password	required	<i>password</i>
action	required	getVoiceList
clTRID	optional	client transaction ID

This command returns a list of voices available for text-to-speech operations, including the name, language, dialect, and sex.

getSoundList

List available sounds

Input:

username	required	<i>username</i>
password	required	<i>password</i>
action	required	getSoundList
clTRID	optional	client transaction ID

This command returns a list of sounds available for embedding in text-to-speech operations.

Sounds can be embedded in TTS operations using square-brackets, e.g. "Hello [laugh] this is George W. Bush calling from the [sneeze] White House."

previewChatCall

Returns a URL with a .wav preview of the ChatCall, suitable for playback to the end user

Input:

username	required	<i>username</i>
password	required	<i>password</i>
action	required	previewChatCall
fromName	optional	name of the person sending the ChatCall
<i>Note: if fromName is not specified, the word "Name" will be used</i>		
message	required	the message to send
toName	optional	name of the person receiving the ChatCall
<i>Note: if toName is not specified, or is specified more than once, the word "Name" will be used</i>		
voice	optional	voice to use for TTS (defaults to our clearest, female voice)
responseType	optional	none, yes_no, yes_no_maybe
clTRID	optional	client transaction ID

This command returns a URL to a .wav file suitable for playback to the end user.

sendChatCall

Sends a ChatCall

Input:

username	required	<i>username</i>
password	required	<i>password</i>
action	required	sendChatCall
fromName	required	name of the person sending the ChatCall
fromEmail	required	email address of person sending the ChatCall
message	required	the message to send
toName	required*	name of the person receiving the ChatCall
toNumber	required*	phone number of the person receiving the ChatCall
<i>Note: use E.164 format, e.g. +18585608120. Currently restricted to NANPA (US + CA) numbers only</i>		
voice	optional	voice to use for TTS (defaults to our clearest, female voice)
responseType	optional	none, yes_no, yes_no_maybe
sendDate	optional	when to send the ChatCall (defaults to "now")
<i>Note: use Unix epoch time or XML standard format (e.g. 2007-12-01T13:28:50.0000Z)</i>		
clTRID	optional	client transaction ID

*toName and toNumber can be repeated in the query string to indicate multiple recipients

This command sends or schedules the sending of a ChatCall. The command returns immediately with a ChatCall ID, which can be used to query ChatCall status.

Note: this API is currently restricted to the public ChatCall business model in which each recipient hears an ad which finances the call and synthesis.

getChatCallStatus

Input:

username	required	<i>username</i>
password	required	<i>password</i>
action	required	getChatCallStatus
ChatCallID	required	ChatCall ID from sendChatCall
clTRID	optional	client transaction ID

This command returns the status of a ChatCall, including status per recipient.

Call control API (BETA)

Customers may enable Phone.com's call control API on a per-account basis. This allows the customer to control incoming calls via a web service running on HTTP or HTTPS (for example, via PHP or ASP.NET).

Pre-requisites:

- 1) Contact Phone.com to enable call control API on the account.
- 2) Provide Phone.com with a URL with which Phone.com will interact and obtain routing instructions for all incoming calls for numbers that have **no call routing** or "disconnect" call routing.

Methodology:

- 1) When an incoming call arrives, if the dialed phone number has no call handling rules established, or if the number's call handling rules are set to "disconnect", Phone.com will access the pre-provided URL with the following parameters in the query string:
 1. uniqueID – a Phone.com-assigned unique ID to identify the call
 2. dialedNumber – the Phone.com phone number being dialed
 3. callerIdNumber – the caller ID number of the caller*
 4. callerIdName – the caller ID name (CNAM) of the caller*

* caller ID information is not always available, depending on the calling network and other parameters of the call.

- 1) The web service MUST then respond with Content-type: text/plain and one

of the commands listed below.

- 2)
- 3) Phone.com will then process the command, and eventually will access the pre-provided URL again with additional information (see detail below). This process will repeat until the call completes. On each access, the fields above will be populated, and the web service's previous response will be contained in the field "previous-response".
- 4)
- 5) Once the call completes, Phone.com will access the pre-provided URL a final time with the same fields above, plus a "duration" field that indicates the duration of the call in seconds.
- 6)
- 7) In any case that an error occurs, either because the syntax of the command is invalid or otherwise, Phone.com will access the pre-provided URL with the same fields above, plus an "error" field. The customer may also configure an email address which will receive real-time error reports.

Commands:

simple-forward,DDDDDD

Forward the caller to the number specified. The number must be an E.164 phone number, for example: 18585602222. To send DTMF tones to the called party, append "w" followed by digits, for example: "18585602222w1234". Additional "w" can be specified; each provides 0.5 second pause, e.g. "18585602222ww1234w5" would wait 1 second after the called party answers, then send DTMF "1234" followed by a 0.5 second pause, followed by DTMF "5".

simple-forward-voicetag,"TEXT",DDDDDD

Forward the caller to the number specified with prepended voice tag. The number must be an E.164 phone number, for example: 18585602222. The voice tag text is required and must be enclosed in double quotes, if voice tag is not needed use simple-forward. Voice tag is recommended to be a couple words or a max of 40 characters. To send DTMF tones to the called party, append "w" followed by digits, for example: "18585602222w1234". Additional "w" can be specified; each provides 0.5 second pause, e.g. "18585602222ww1234w5" would wait 1 second after the called party answers, then send DTMF "1234" followed by a 0.5 second pause, followed by DTMF "5".

multiple-forward,DDDDDD,DDDDDD,....

Forward the caller to the numbers specified. Each number must be an E.164 phone number, for example: 18585602222. Note that the numbers are rang simultaneously and the caller is then connected to the first number to answer. Note: The "DTMF append" functionality, described above, works only on simple-forward (not multiple-forward).

multiple-forward-voicetag,"TEXT",DDDDDD,DDDDDD,....

Forward the caller to the numbers specified. Each number must be an E.164 phone number, for example: 18585602222. The voice tag text is required and must be enclosed in double quotes, if voice tag is not needed use multiple-forward. Voice tag is recommended to be a couple words or a max of 40 characters. Note that the numbers are rang simultaneously and the caller is then connected to the first number to answer. Note: The "DTMF append" functionality, described above, works only on simple-forward (not multiple-forward).

play-and-get-digits,Recording Name,Pattern

Play a greeting to the caller. The greeting is referred to by the name of the recording as found in the Phone.com UI. The pattern is an "expect" pattern built using the characters 0-9 or D. Multiple patterns are specified by joining with "|".

After the caller presses DTMFs that match the pattern, or after a timeout occurs, Phone.com will access the web service with the field "digits" containing the DTMF digits received (if any).

559"	Example pattern: 55D	"any number between 550 and
	Example pattern: DDDIDDDD	"3 or 4 digits"