

# Domain Availability API User Guide

Domain Availability API helps you check whether a domain name is available for registration quickly and accurately.

WhoisXmlApi.com provides RESTful APIs. It is designed for server-to-server communication between your system and the WhoisXmlApi.com network using standard HTTP or HTTPS protocols. The query responses are delivered in either XML or JSON formats based on your requests which are made through GET/POST methods.

To get started you need a developer's account with WhoisXmlApi.com. Authentication is required each time in order to use the API. The first 500 Domain Availability API calls are complimentary when you register for a free developer account.

## API Status

You can check the API's current performance and availability status on the [API Status Page](#).

## Making a Call to Domain Availability API Web Service

Use the following URL:

[whoisxmlapi.com/whoisserver/WhoisService?cmd=GET\\_DN\\_AVAILABILITY&domainName=test.com&username=x&password=x&getMode=DNS\\_AND\\_WHOIS](https://whoisxmlapi.com/whoisserver/WhoisService?cmd=GET_DN_AVAILABILITY&domainName=test.com&username=x&password=x&getMode=DNS_AND_WHOIS)

### Supported input parameters

Parameters	Values
domainName	<b>required</b> , the domain for which whois data is requested
username	<b>required unless</b> ApiKey authentication is used, your account username
password	<b>required unless</b> ApiKey authentication is used, your account password; <b>make sure it is <a href="#">URL-encoded</a> if it contains special characters (&amp;, %, * etc.)</b>
requestObject	<b>required unless</b> password authentication is used, encoded user identifier for ApiKey authentication

Parameters	Values
digest	<b>required unless</b> password authentication is used, ApiKey access token
cmd	<b>required</b> , GET_DN_AVAILABILITY
outputFormat	XML   JSON (defaults to XML)
getMode	DNS_AND_WHOIS   DNS_ONLY (defaults to DNS_ONLY) the default mode is the fastest, the DNS_AND_WHOIS mode is slower but more accurate

## Authentication

### Password authentication

This method uses your account's username and password to authenticate with the web service. Just pass your credentials as query string parameters (*username*, *password*).

### API key authentication

Generate access tokens providing your API and secret keys to make Domain Availability API calls without sending your username and password. These tokens will need to be included as part of the request URL (*requestObject*, *digest*). Please, note that all tokens expire after 5 minutes and will have to be regenerated. Access the [API Key Management](#) section of your account to create your keys (make sure the key you're using is marked as active).

## Query Account Balance Information

In order to query your account balance, use the following URL:

<https://www.whoisxmlapi.com/accountServices.php?servicetype=accountbalance&username=x&password=x>

### Supported input parameters

Parameters	Values
servicetype	<b>required</b> , type of service; in this case, "accountBalance"
username	<b>required</b> , your account username
password	<b>required</b> , your account password; <b>make sure it is <a href="#">URL-encoded</a> if it contains special characters (&amp;, %, * etc.)</b>

## Account Balance Low or Zero Notification

When your account balance falls below certain level (default is 100, but customizable as per your need) you will receive an email alert. Another email will be sent when your account balance reaches 0.

To customize the warning level, use the URL:

[whoisxmlapi.com/accountServices.php?servicetype=accountUpdate&username=x&password=x&warn\\_threshold=30](https://whoisxmlapi.com/accountServices.php?servicetype=accountUpdate&username=x&password=x&warn_threshold=30)

### Supported input parameters

Parameters	Values
servicetype	<b>required</b> , type of service; in this case, "accountUpdate"
username	<b>required</b> , your account username
password	<b>required</b> , your account password; <b>make sure it is URL-encoded if it contains special characters (&amp;, %, * etc.)</b>
warn_threshold	a positive number (defaults to 10) when your account balance reaches this value a warning email will be sent
warn_threshold_enabled	0   1 (defaults to 1) indicates whether the low balance warning notification will be sent at all
warn_empty_enabled	0   1 (defaults to 1) indicates whether the zero balance email notification will be sent to you
output_format	XML   JSON (defaults to XML)

## Usage of HTTP & HTTPS

You can use both http and https to make API queries. With HTTPS the connection will be more secure but slightly slower.

## TLDs Supported

We support thousands of TLDs, both gTLDs and ccTLDs. You can see the entire list [here](#).

## XML Schema / Domain Availability Query Result Documentation

You can download the following for your reference:

[xml schema](#)

[sample xml result](#)

An XML Schema describes the structure of an XML document. The XML Schema language is also referred to as XML Schema Definition (XSD).

More info:

[https://www.w3schools.com/xml/schema\\_intro.asp](https://www.w3schools.com/xml/schema_intro.asp)

## Sample Code for Making a Query to Domain Availability API Web Service

You may view examples of querying Domain Availability API by clicking on the following links or visiting our [GitHub page](#).

### User password authentication

- C#: [example](#), [full project](#)
- Java: [example](#), [full project](#)
- Javascript: [example](#)
- Node.js: [example](#)
- Perl: [example](#)
- PHP: [example](#)
- PowerShell: [example](#)
- Python: [example](#)
- Ruby: [example](#)

### API key authentication

- C#: [example](#), [full project](#)
- Java: [example](#), [full project](#)
- Javascript: [example](#)
- Node.js: [example](#)
- Perl: [example](#)
- PHP: [example](#)
- PowerShell: [example](#)
- Python: [example](#)
- Ruby: [example](#)

## Error Handling

Error information containing the [error code](#) and text description is returned in the following format.

### Sample output

<pre>&lt;ErrorMessage&gt;   &lt;errorCode&gt;WHOIS_01&lt;/errorCode&gt;   &lt;msg&gt;     The parameter domainName is missing.   &lt;/msg&gt; &lt;/ErrorMessage&gt;</pre>	<pre>{   "ErrorMessage": {     "errorCode": "WHOIS_01"     "msg": "The parameter domainName is missing."   } }</pre>
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## Usage Limits & Requests Throttling

The maximum number of requests per second is 30. In case that the limit is breached, your subsequent requests will be rejected until the next second.

### Sample output

XML	JSON
<pre>&lt;ErrorMessage&gt;   &lt;errorCode&gt;AUTHENTICATE_06&lt;/errorCode&gt;   &lt;msg&gt;     You are limited to 30 queries per second. The request is     rejected.   &lt;/msg&gt; &lt;/ErrorMessage&gt;</pre>	<pre>{   "ErrorMessage": {     "errorCode": "WHOIS_01"     "msg": "You are limited to 30 queries per second.     The request is rejected."   } }</pre>

## Terms of Service or SLA for Using Domain Availability API Web Service

Please click on the link to review the [Terms of Service](#).

## Sample Output (XML)

Unavailable	Available
<pre>&lt;DomainInfo&gt;   &lt;domainAvailability&gt;     UNAVAILABLE   &lt;/domainAvailability&gt;   &lt;domainName&gt;     test.com   &lt;/domainName&gt; &lt;/DomainInfo&gt;</pre>	<pre>&lt;DomainInfo&gt;   &lt;domainAvailability&gt;     AVAILABLE   &lt;/domainAvailability&gt;   &lt;domainName&gt;     Binaryworld123.com   &lt;/domainName&gt; &lt;/DomainInfo&gt;</pre>

## Sample Output (JSON)

Unavailable	Available
<pre>{   "domainAvailability": "UNAVAILABLE",   "domainName": "test.com" }</pre>	<pre>{   "domainAvailability": "AVAILABLE",   "domainName": "binaryworld123.com" }</pre>

## Output Schema

```
{
  "domainAvailability": "String",
  "domainName": "String"
}
```

## Error Codes

WHOIS\_01: *\$errorMessage*

WHOIS\_02: *User is not logged in.*

WHOIS\_03: *Unable to retrieve whois record for \$domainName*

WHOIS\_04: *\$errorMessage*

DB\_01: *Authentication can not complete due to database error.*

DB\_02: *Exception in getUser : \$errorMessage*

DB\_03: *ApiKey is missing*

DB\_04: *Api Key is not found.*

DB\_05: *Exception in getApiKey() while getting Entity: \$errorMessage*

DB\_06: *Api Key is not found.*

DB\_07: *Exception in getApiKey() while getting Entity: \$errorMessage*

AUTHENTICATE\_01: *Queries available for \$id is \$balance/\$reserve # monthly: \$monthlyBalance:\$monthlyReserve, please refill*

AUTHENTICATE\_02: *Queries available for \$ip is \$balance/\$reserve, please refill*

AUTHENTICATE\_03: *Username/password is missing*

AUTHENTICATE\_04: *ApiKey parameters missing*

AUTHENTICATE\_05: *Access restricted due to the subscription limitation.*

AUTHENTICATE\_06: *You are limited to 30 queries per second. The request is rejected.*

AUTHENTICATE\_07: *Request timeout*

AUTHENTICATE\_08: *Timestamp in the future*

AUTHENTICATE\_09: *Unknown error!*

AUTHENTICATE\_10: *User account \$userName is \$status*

AUTHENTICATE\_11: *Token missing*

AUTHENTICATE\_12: *Decoding token failed*

AUTHENTICATE\_13: *Token has expired*

AUTHENTICATE\_14: *Captcha authentication failed*

AUTHENTICATE\_15: *Cannot get IPQuota*

AUTHENTICATE\_16: *Username is missing*

AUTHENTICATE\_17: *Password is missing*

AUTHENTICATE\_18: *Invalid username/password.*

API\_KEY\_01: *ApiKey is disabled.*

API\_KEY\_02: *Timestamp in the future*

API\_KEY\_03: *Request timeout*

API\_KEY\_04: *You are not authorized*

API\_KEY\_05: *ApiKey authenticate failed: \$errorMessage*