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

Supported input parameters

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>domainName</td>
<td>required, the domain for which whois data is requested</td>
</tr>
<tr>
<td>username</td>
<td>required unless ApiKey authentication is used, your account username</td>
</tr>
<tr>
<td>password</td>
<td>required unless ApiKey authentication is used, your account password; make sure it is URL-encoded if it contains special characters (&amp;, %, * etc.)</td>
</tr>
<tr>
<td>requestObject</td>
<td>required unless password authentication is used, encoded user identifier for ApiKey authentication</td>
</tr>
<tr>
<td>digest</td>
<td>required unless password authentication is used, ApiKey access token</td>
</tr>
<tr>
<td>cmd</td>
<td>required, GET_DN_AVAILABILITY</td>
</tr>
<tr>
<td>outputFormat</td>
<td>XML</td>
</tr>
<tr>
<td>getMode</td>
<td>DNS_AND_WHOIS</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>servicetype</td>
<td>required, type of service; in this case, &quot;accountBalance&quot;</td>
</tr>
<tr>
<td>username</td>
<td>required, your account username</td>
</tr>
<tr>
<td>password</td>
<td>required, your account password; make sure it is URL-encoded if it contains special characters (&amp;, %, * etc.)</td>
</tr>
</tbody>
</table>
**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:

**Supported input parameters**

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>servicetype</td>
<td>required, type of service; in this case, &quot;accountUpdate&quot;</td>
</tr>
<tr>
<td>username</td>
<td>required, your account username</td>
</tr>
<tr>
<td>password</td>
<td>required, your account password; make sure it is URL-encoded if it contains special characters (&amp;, %, * etc.)</td>
</tr>
<tr>
<td>warn_threshold</td>
<td>a positive number (defaults to 10) when your account balance reaches this value a warning email will be sent</td>
</tr>
<tr>
<td>warn_threshold_enabled</td>
<td>0</td>
</tr>
<tr>
<td>warn_empty_enabled</td>
<td>0</td>
</tr>
<tr>
<td>output_format</td>
<td>XML</td>
</tr>
</tbody>
</table>

**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](http://www.whoisxmlapi.com/website/).  

**XML Schema / Domain Availability Query Result Documentation**

You can download the following for your reference:

- [xml schema](http://www.whoisxmlapi.com/website/)
- [sample xml result](http://www.whoisxmlapi.com/website/)

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
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- 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

```
<ErrorMessage>
  <errorCode>WHOIS_01</errorCode>
  <msg>
    The parameter domainName is missing.
  </msg>
<ErrorMessage>
```

```
{
  "ErrorMessage": {
    "errorCode": "WHOIS_01"
    "msg": "The parameter domainName is missing."
  }
}
```

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

```
<ErrorMessage>
  <errorCode>AUTHENTICATE_06</errorCode>
  <msg>
    You are limited to 30 queries per second. The request is rejected.
  </msg>
<ErrorMessage>
```

```
{
  "ErrorMessage": {
    "errorCode": "WHOIS_01"
    "msg": "You are limited to 30 queries per second.
    The request is rejected."
  }
}
```

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)

<table>
<thead>
<tr>
<th>Unavailable</th>
<th>Available</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>&lt;DomainInfo&gt;</code></td>
<td><code>&lt;DomainInfo&gt;</code></td>
</tr>
<tr>
<td><code>&lt;domainAvailability&gt;</code></td>
<td><code>&lt;domainAvailability&gt;</code></td>
</tr>
<tr>
<td>UNAVAILABLE</td>
<td>AVAILABLE</td>
</tr>
<tr>
<td><code>&lt;/domainAvailability&gt;</code></td>
<td><code>&lt;/domainAvailability&gt;</code></td>
</tr>
<tr>
<td><code>&lt;domainName&gt;</code></td>
<td><code>&lt;domainName&gt;</code></td>
</tr>
<tr>
<td>test.com</td>
<td>Binaryworld123.com</td>
</tr>
<tr>
<td><code>&lt;/domainName&gt;</code></td>
<td><code>&lt;/domainName&gt;</code></td>
</tr>
<tr>
<td><code>&lt;/DomainInfo&gt;</code></td>
<td><code>&lt;/DomainInfo&gt;</code></td>
</tr>
</tbody>
</table>

Sample Output (JSON)

<table>
<thead>
<tr>
<th>Unavailable</th>
<th>Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>{</td>
<td>{}</td>
</tr>
<tr>
<td>&quot;domainAvailability&quot;: &quot;UNAVAILABLE&quot;,</td>
<td>&quot;domainAvailability&quot;: &quot;AVAILABLE&quot;,</td>
</tr>
<tr>
<td>&quot;domainName&quot;: &quot;test.com&quot;</td>
<td>&quot;domainName&quot;: &quot;binaryworld123.com&quot;</td>
</tr>
<tr>
<td>}</td>
<td>}</td>
</tr>
</tbody>
</table>

Output Schema

```json
{
  "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