



IP2Location™

Web API Reference

<http://www.ip2location.com>

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1. Overview

IP2Location™ IP-Country web service is providing a service to reverse lookup of IP address to ISO3166 country code. This document explains in details the semantics of the URL function calls you can make to use this web service for demonstration or commercial purposes. In this document, you will learn:

- How IP2Location™ IP-Country & IP-ISP query syntax works.
- How to interpret the search results from IP2Location™ Web API.
- How to install, setup and test the IP2Location™ Web API.

If you have comments, find errors, or just have questions, please contact sales@ip2location.com.

2. Search Request Format

Search requests submit a query string and a set of parameters to the IP2Location™ Web APIs service and receive a search result. Search results are derived from IP2Location™ index of over 4 billion unique IP addresses.

2.1 Search Parameters

This table lists all the valid name-value pairs that can be used in a search request and describes how these parameters will modify the search results.

Name	Description
ip	IP address for reverse lookup purpose. The correct syntax of an IP address is xxx.xxx.xxx.xxx. For example 161.128.12.4.
acc	Account ID charged to perform the lookup. Each query consumes a credit from this account. For demo version, use “demo” as the account ID.
pass	Password to validate the Account ID is correct per query. For demo version, use “demo” as the password.

2.2 Search Web API

IP2Location™ Web API uses a single web interface to perform the reverse lookup logic. The protocol used is HTTP GET. You can test this API as easy as using a web browser.

Syntax: (Country Edition)

<http://www.ip2location.com/ipcountry.asp?ip=<ipadd>&acc=<accID>&pass=<passwd>>

Syntax: (ISP Edition)

<http://www.ip2location.com/ipisp.asp?ip=<ipadd>&acc=<accID>&pass=<passwd>>

3. Search Results Format

All successful HTTP request will return a response code of 200. In our web API, it also returns the lookup country code if successful or error code if failed.

3.1 Error Codes

This table lists all the valid errors that can be return in a search request and describes what these responses mean.

Name	Description
ACCOUNT_MAX_LIMIT	Account has not enough credit to perform the lookup. Users need to top-up the account before can use the service again.
ACCOUNT_EXPIRED	Account has been expired. Users need to renew the license before can use the service again.
DEMO_MAX_LIMIT	Maximum attempts reached for demo version. The demo version allows 20 searches/day from an IP address. You could try the demo again from the same IP address after our server refresh once per day.
INVALID_ACCOUNT	Invalid combination of account ID or password used.
INVALID_IP_ADDRESS	Invalid IP address provided in query string.
MISSING_ACC	Account ID is missing from query string.
MISSING_IP	IP address is missing from query string.
MISSING_PASS	Password is missing from query string.

3.2 Country Codes

This table lists all valid ISO3166 two characters country codes that returns from web API query and describe the country names behind these country codes.

Country Code	Country Name
AD	ANDORRA
AE	UNITED ARAB EMIRATES
AF	AFGHANISTAN
AG	ANTIGUA AND BARBUDA
AI	ANGUILLA
AL	ALBANIA
AM	ARMENIA
AN	NETHERLANDS ANTILLES
AO	ANGOLA
AP	ASIA PACIFIC
AQ	ANTARCTICA
AR	ARGENTINA
AS	AMERICAN SAMOA
AT	AUSTRIA
AU	AUSTRALIA
AW	ARUBA
AZ	AZERBAIJAN
BA	BOSNIA AND HERZEGOWINA
BB	BARBADOS
BD	BANGLADESH
BE	BELGIUM
BF	BURKINA FASO
BG	BULGARIA
BH	BAHRAIN
BI	BURUNDI
BJ	BENIN
BM	BERMUDA
BN	BRUNEI DARUSSALAM
BO	BOLIVIA
BR	BRAZIL
BS	BAHAMAS
BT	BHUTAN
BV	BOUVET ISLAND
BW	BOTSWANA
BY	BELARUS
BZ	BELIZE
CA	CANADA
CC	COCOS (KEELING) ISLANDS
CD	CONGO, THE DEMOCRATIC REPUBLIC OF THE

CF	CENTRAL AFRICAN REPUBLIC
CG	CONGO
CH	SWITZERLAND
CI	COTE D'IVOIRE
CK	COOK ISLANDS
CL	CHILE
CM	CAMEROON
CN	CHINA
CO	COLOMBIA
CR	COSTA RICA
CS	CZECHOSLOVAKIA (FORMER)
CU	CUBA
CV	CAPE VERDE
CX	CHRISTMAS ISLAND
CY	CYPRUS
CZ	CZECH REPUBLIC
DE	GERMANY
DJ	DJIBOUTI
DK	DENMARK
DM	DOMINICA
DO	DOMINICAN REPUBLIC
DZ	ALGERIA
EC	ECUADOR
EE	ESTONIA
EG	EGYPT
EH	WESTERN SAHARA
ER	ERITREA
ES	SPAIN
ET	ETHIOPIA
EU	EUROPEAN UNION
FI	FINLAND
FJ	FIJI
FK	FALKLAND ISLANDS (MALVINAS)
FM	MICRONESIA, FEDERATED STATES OF
FO	FAROE ISLANDS
FR	FRANCE
FX	FRANCE, METROPOLITAN
GA	GABON
GB	GREAT BRITAIN
GD	GRENADA
GE	GEORGIA
GF	FRENCH GUIANA
GH	GHANA
GI	GIBRALTAR
GL	GREENLAND

GM	GAMBIA
GN	GUINEA
GP	GUADELOUPE
GQ	EQUATORIAL GUINEA
GR	GREECE
GS	SOUTH GEORGIA & SOUTH SANDWICH ISLANDS
GT	GUATEMALA
GU	GUAM
GW	GUINEA-BISSAU
GY	GUYANA
HK	HONG KONG
HM	HEARD ISLAND AND MCDONALD ISLANDS
HN	HONDURAS
HR	CROATIA
HT	HAITI
HU	HUNGARY
ID	INDONESIA
IE	IRELAND
IL	ISRAEL
IN	INDIA
IO	BRITISH INDIAN OCEAN TERRITORY
IQ	IRAQ
IR	IRAN, ISLAMIC REPUBLIC OF
IS	ICELAND
IT	ITALY
JM	JAMAICA
JO	JORDAN
JP	JAPAN
KE	KENYA
KG	KYRGYZSTAN
KH	CAMBODIA
KI	KIRIBATI
KM	COMOROS
KN	SAINT KITTS AND NEVIS
KP	KOREA, DEMOCRATIC PEOPLE'S REPUBLIC OF
KR	KOREA, REPUBLIC OF
KW	KUWAIT
KY	CAYMAN ISLANDS
KZ	KAZAKSTAN
LA	LAO PEOPLE'S DEMOCRATIC REPUBLIC
LB	LEBANON
LC	SAINT LUCIA
LI	LIECHTENSTEIN
LK	SRI LANKA
LR	LIBERIA

LS	LESOTHO
LT	LITHUANIA
LU	LUXEMBOURG
LV	LATVIA
LY	LIBYAN ARAB JAMAHIRIYA
MA	MOROCCO
MC	MONACO
MD	MOLDOVA, REPUBLIC OF
MG	MADAGASCAR
MH	MARSHALL ISLANDS
MK	MACEDONIA, THE FORMER YUGOSLAV
ML	MALI
MM	MYANMAR
MN	MONGOLIA
MO	MACAU
MP	NORTHERN MARIANA ISLANDS
MQ	MARTINIQUE
MR	MAURITANIA
MS	MONTSERRAT
MT	MALTA
MU	MAURITIUS
MV	MALDIVES
MW	MALAWI
MX	MEXICO
MY	MALAYSIA
MZ	MOZAMBIQUE
NA	NAMIBIA
NC	NEW CALEDONIA
NE	NIGER
NF	NORFOLK ISLAND
NG	NIGERIA
NI	NICARAGUA
NL	NETHERLANDS
NO	NORWAY
NP	NEPAL
NR	NAURU
NU	NIUE
NZ	NEW ZEALAND
OM	OMAN
PA	PANAMA
PE	PERU
PF	FRENCH POLYNESIA
PG	PAPUA NEW GUINEA
PH	PHILIPPINES
PK	PAKISTAN

PL	POLAND
PM	SAINT PIERRE AND MIQUELON
PN	PITCAIRN
PR	PUERTO RICO
PS	PALESTINIAN TERRITORY, OCCUPIED
PT	PORTUGAL
PW	PALAU
PY	PARAGUAY
QA	QATAR
RE	REUNION
RO	ROMANIA
RU	RUSSIAN FEDERATION
RW	RWANDA
SA	SAUDI ARABIA
SB	SOLOMON ISLANDS
SC	SEYCHELLES
SD	SUDAN
SE	SWEDEN
SG	SINGAPORE
SH	SAINT HELENA
SI	SLOVENIA
SJ	SVALBARD AND JAN MAYEN
SK	SLOVAKIA
SL	SIERRA LEONE
SM	SAN MARINO
SN	SENEGAL
SO	SOMALIA
SR	SURINAME
ST	SAO TOME AND PRINCIPE
SU	RUSSIAN FEDERATION
SV	EL SALVADOR
SY	SYRIAN ARAB REPUBLIC
SZ	SWAZILAND
TC	TURKS AND CAICOS ISLANDS
TD	CHAD
TF	FRENCH SOUTHERN TERRITORIES
TG	TOGO
TH	THAILAND
TJ	TAJIKISTAN
TK	TOKELAU
TM	TURKMENISTAN
TN	TUNISIA
TO	TONGA
TP	EAST TIMOR
TR	TURKEY

TT	TRINIDAD AND TOBAGO
TV	TUVALU
TW	TAIWAN, PROVINCE OF CHINA
TZ	TANZANIA, UNITED REPUBLIC OF
UA	UKRAINE
UG	UGANDA
UK	UNITED KINGDOM
UM	UNITED STATES MINOR OUTLYING ISLANDS
US	UNITED STATES
UY	URUGUAY
UZ	UZBEKISTAN
VA	HOLY SEE (VATICAN CITY STATE)
VC	SAINT VINCENT AND THE GRENADINES
VE	VENEZUELA
VG	VIRGIN ISLANDS, BRITISH
VI	VIRGIN ISLANDS, U.S.
VN	VIET NAM
VU	VANUATU
WF	WALLIS AND FUTUNA
WS	SAMOA
YE	YEMEN
YT	MAYOTTE
YU	YUGOSLAVIA
ZA	SOUTH AFRICA
ZM	ZAMBIA
ZW	ZIMBABWE

4. Setup and Installation

This section demonstrates how to setup and to use the API from server-side scripts such as ASP and PHP. However, it does not limit to the example listed here. Any other programming languages or scripting languages that support HTTP should be able to use this web API.

4.1 Active Server Pages

```
Dim objHttp, strQuery
strQuery = "http://ip2location.com/ipcountry.asp?" & _
    "ip=" & ipAddress & _
    "&acc=" & accountID & _
    "&pass=" & password
set objHttp = Server.CreateObject("Msxml2.ServerXMLHTTP")
objHttp.open "GET", strQuery, false
objHttp.send
```

```
Response.Write objHttp.ResponseText
Set objHttp = Nothing
```

Requirements:

1. ASP 3.0+
2. Microsoft® XML 3.0 Component

Microsoft® XML 3.0 Component can be download for free at <http://msdn.microsoft.com/xml/general/xmlparser.asp>.

4.2 VB.NET

```
Imports System.Net
Imports System.IO

Private Sub WebAPI()
    Dim strQuery As String
    Dim IPAddress As String = "218.111.156.5"
    Dim accountID As String = "demo"
    Dim password As String = "demo"
    Dim HttpWReq As HttpWebRequest
    Dim HttpWResp As Net.HttpWebResponse

    strQuery = "http://ip2location.com/ipcountry.asp?" & _
        "ip=" & IPAddress & _
        "&acc=" & accountID & _
        "&pass=" & password
    HttpWReq = WebRequest.Create(strQuery)
    HttpWReq.Method = "GET"
    HttpWResp = HttpWReq.GetResponse()
    Dim reader As System.IO.StreamReader = _
        New IO.StreamReader(HttpWResp.GetResponseStream())
    Response.Write(reader.ReadToEnd)
End Sub
```

Requirements:

1. Microsoft® .NET Framework 1.0

4.3 C#

```
using System.Net;
using System.IO;
private void WebAPI()
{
    string strQuery;
    string IPAddress = "218.111.156.5";
    string accountID = "demo";
    string password = "demo";
    HttpWebRequest HttpWReq;
    HttpWebResponse HttpWResp;
    strQuery = "http://ip2location.com/ipcountry.asp?" +
```

```

        "ip=" + IPAddress +
        "&acc=" + accountID +
        "&pass=" + password;
HttpWReq = (HttpWebRequest)WebRequest.Create(strQuery);
HttpWReq.Method = "GET";
HttpWResp = (HttpWebResponse)HttpWReq.GetResponse();
System.IO.StreamReader reader = new
System.IO.StreamReader(HttpWResp.GetResponseStream());
Response.Write(reader.ReadToEnd());
}

```

Requirements:

1. Microsoft® .NET Framework 1.0

4.4 PHP: Hypertext Preprocessor

```

$query = "http://ip2location.com/ipcountry.asp?ip=" . $ipaddress
. "&acc=" . $acc . "&pass=" . $pass;
$url = parse_url($query);
$host = $url["host"];
$path = $url["path"] . "?" . $url["query"];
$fp = fsockopen ($host, 80, $errno, $errstr, 60) or die('Can not
open connection to server.');
```

```

if (!$fp) {
    echo "$errstr ($errno)<br>\n";
} else {
    fputs ($fp, "GET $path HTTP/1.0\r\nHost: " . $host .
"\r\n\r\n");
    while (!feof($fp)) {
        $tmp .= fgets ($fp, 128);
    }
    $array = split("\r\n", $tmp);
    $country = $array[count($array)-1];
    fclose ($fp);
}
echo $country;

```

Requirements:

1. PHP 3+

4.5 Perl/CGI

```

use LWP::UserAgent;
use HTTP::Request::Common qw(GET);

my $ipaddress = $ENV{"REMOTE_ADDR"};
my $query = "http://ip2location.com/ipcountry.asp?ip=" .
$ipaddress . "&acc=" . $acc . "&pass=" . $pass;
my $ua = new LWP::UserAgent;
my $res = $ua->request(GET $query);
if ($res->is_success())
{

```

```
        my $co = $res->content;
    }
    print $co;
```

4.4 Web Browser

Copy URL below into a web browser. Replace all parameters with the correct values.

<http://ip2location.com/ipcountry.asp?ip=<ipadd>&acc=<accID>&pass=<passwd>>

<http://ip2location.com/ipisp.asp?ip=<ipadd>&acc=<accID>&pass=<passwd>>

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