GeoIP2 CSV Databases

In addition to our MaxMind DB binary format, we also offer GeoIP2 databases in a CSV format suitable for importing into a SQL database. This documentation details the format of those CSV files. The CSV files are shipped as a single zip file.

Zip File

The zip file itself is named {Product}-{Content}-CSV_latest.zip. The {Product} is either "GeoIP2" or "GeoLite2". The {Content} refers to the particular product name, such as "City" or "Country".

The downloaded zip file contains a single directory which in turn contains four files. That directory is named {Product}-{Content}-CSV_{YYYYMMDD}.zip. The files are LICENSE.txt, COPYRIGHT.txt, {Product}-{Content}-Blocks.csv, and {Product}-{Content}-Location.csv.

CSV File Format

All the CSV files starts with a single header row containing column names. The specific column names and their contents are detailed below. The files are encoded as UTF-8.

Blocks Files

There are two CSV files for network blocks, one each for IPv4 and IPv6 blocks. These files are named {Product}-{Content}-Blocks-IPv4.csv and {Product}-{Content}-Blocks-IPv6.csv respectively. An example name would be "GeoIP2-City-Blocks-IPv4.csv".

			Included in	
Name	Type	Description	Country?	City?
network	IP network as a string	This is the IPv4 or IPv6 network in CIDR format such as "2.21.92.0/29" or "2001:4b0::/80". We offer a utility to convert this column to start/end IPs or start/end integers. See the conversion utility section for details.		
geoname_id	integer	A unique identifier for the network's location as specified by <u>GeoNames</u> . This ID can be used to look up the location information in the Location file.		
registered_country_geoname_id	integer	The registered country is the country in which the ISP has registered the network. This column contains a unique identifier for the network's registered country as specified by GeoNames. This ID can be used to look up the location information in the Location file.		
represented_country_geoname_id	integer	The represented country is the country which is represented by users of the IP		

		address. For instance, the country represented by an overseas military base. This column contains a unique identifier for the network's registered country as specified by GeoNames. This ID can be used to look up the location information in the Location file.	
is_anonymous_proxy	boolean	A 1 if the network is an <u>anonymous</u> <u>proxy</u> , otherwise 0.	
is_satellite_provider	boolean	A 1 if the network is for a satellite provider that provides service to multiple countries, otherwise 0.	
postal_code	string	The postal code associated with the IP address. These are available for some IP addresses in Australia, Canada, France, Germany, Italy, Spain, Switzerland, United Kingdom, and the US. We return the first 3 characters for Canadian postal codes. We return the the first 2-4 characters (outward code) for postal codes in the United Kingdom.	
latitude	decimal	The latitude of the location associated with the network.	
longitude	decimal	The longitude of the location associated with the network.	

Locations Files

The zip file includes one location file for each locale code for which data is available. There will always be an "en" file. The other possible locales are "de", "es", "fr", "ja", "pt-BR", "ru", and "zh-CN". Depending on the data available for a given GeoIP2 data set, we may not include all of these locales.

These files are named $\{Product\}-\{Content\}-Locations-\{locale\}.csv.$ An example name would be "GeoIP2-City-Locations-en.csv".

			Included in	
Name	Type	Description	Country?	City?
geoname_id	integer	A unique identifier for the a location as specified by GeoNames. This ID can be used as a key for the Location file.		
locale_code	string	The locale that the names in this row are in. This will always correspond to the locale name of the file.		
continent_code	string (2)	The continent code for this location. Possible codes are: • AF - Africa • AS - Asia • EU - Europe	•	

		• NA - North America	
		• OC - Oceania	
4	~4	• SA - South America	
continent_name	string	The continent name for this location in the file's locale.	
country_iso_code	string (2)	A two-character <u>ISO 3166-1</u> country code for the country associated with the location.	
country_name	string	The country name for this location in the file's locale.	
subdivision_1_iso_code	string (1-3)	A string of up to three characters containing the region-portion of the ISO 3166-2 code for the first level region associated with the IP address. Some countries have two levels of subdivisions, in which case this is the least specific. For example, in the United Kingdom this will be a country like "England", not a county like "Devon".	
subdivision_1_name	string	The subdivision name for this location in the file's locale. As with the subdivision code, this is the least specific subdivision for the location.	
subdivision_2_iso_code	string (1-3)	A string of up to three characters containing the region-portion of the ISO 3166-2 code for the second level region associated with the IP address. Some countries have two levels of subdivisions, in which case this is the most specific. For example, in the United Kingdom this will be a a county like "Devon", not a country like "England".	
subdivision_2_name	string	The subdivision name for this location in the file's locale. As with the subdivision code, this is the most specific subdivision for the location.	
city_name	string	The city name for this location in the file's locale.	
metro_code	integer	The metro code associated with the IP address. These are only available for networks in the US. MaxMind provides the same metro codes as the Google AdWords API.	
time_zone	integer	The time zone associated with location, as specified by the <u>IANA Time Zone Database</u> , e.g., "America/New_York".	

Conversion Utility

We've created a <u>small utility program</u> to allow you to convert a GeoIP2 CSV file's representation of IP addresses to another format. You can choose between start/end IP addresses, with the addresses represented as strings or integers.

The program is available from our geoip2-csv-converter GitHub project releases tab.