

# geoip egg

---

nting most of the useful API procedures for accessing the freely available **GeoIP Standard Country database**.  
Extension for Chicken Scheme  
Version 1.0.0

**Arto Bendiken**

---

# Table of Contents

|          |                                      |          |
|----------|--------------------------------------|----------|
| <b>1</b> | <b>About this egg .....</b>          | <b>1</b> |
| 1.1      | Version history .....                | 1        |
| 1.2      | Usage .....                          | 1        |
| <b>2</b> | <b>Documentation .....</b>           | <b>2</b> |
| 2.1      | Database operations .....            | 2        |
| 2.2      | Database information .....           | 3        |
| 2.3      | Country code lookup (2-letter) ..... | 3        |
| 2.4      | Country code lookup (3-letter) ..... | 3        |
| 2.5      | Country name lookup .....            | 3        |
| <b>3</b> | <b>Examples .....</b>                | <b>4</b> |
| <b>4</b> | <b>License .....</b>                 | <b>5</b> |
|          | <b>Index .....</b>                   | <b>6</b> |

# 1 About this egg

## 1.1 Version history

1.0.0      initial release.

## 1.2 Usage

Load this egg like so:

```
(require-extension geoip)
```

## 2 Documentation

To build this extension, you will need a current version of the **GeoIP C API** library installed.

### 2.1 Database operations

Note that it is not necessary to explicitly use the following two procedures for accessing the GeoIP Standard Country database, as all the lookup procedures will use that database by default if no DB argument is given.

**geoip:open** [procedure]  
 (geoip:open [FILENAME] [FLAGS])

Opens a GeoIP database with the specified **FILENAME** and **FLAGS**, and returns it as a **geoip:database** object. With no arguments given, will attempt to open the default **GeoIP.dat** that ships with the GeoIP library. To enable caching, pass one of the following constants in **FLAGS**:

**GEOIP-STANDARD**

Read database from file system. This is the default and uses the least memory.

**GEOIP-MEMORY-CACHE**

Load database into memory. Faster performance but uses more memory.

**GEOIP-CHECK-CACHE**

Check for updated database. If the database has been updated, reload the file handle and/or memory cache.

**GEOIP-INDEX-CACHE**

Just cache the most frequently accessed index portion of the database, resulting in faster lookups than with **GEOIP-STANDARD**, but less memory usage than **GEOIP-MEMORY-CACHE**. Useful for larger databases such as GeoIP Organization and GeoIP City.

**geoip:open-type** [procedure]  
 (geoip:open-type TYPE FLAGS)

Opens a GeoIP database of the specified **TYPE** from the standard installation location (usually **/usr/local/share/GeoIP/**). The **FLAGS** are the same as for **(geoip:open)**, and **TYPE** can be one of the following constants:

**GEOIP-COUNTRY-EDITION**

**GEOIP-REGION-EDITION-REVO**

**GEOIP-CITY-EDITION-REVO**

**GEOIP-ORG-EDITION**

**GEOIP-ISP-EDITION**

**GEOIP-CITY-EDITION-REV1**

**GEOIP-REGION-EDITION-REV1**

**GEOIP-PROXY-EDITION**

**GEOIP-ASNUM-EDITION**

**GEOIP-NETSPPEED-EDITION**

## 2.2 Database information

`geoip:database-available?` [procedure]

(`geoip:database-available?` TYPE)

Determines whether a GeoIP database of the class TYPE has been installed.

`geoip:database-edition` [procedure]

(`geoip:database-edition` [DB])

Returns a constant indicating the type of the specified GeoIP database. When called without an argument, returns the type of the default database.

`geoip:database-info` [procedure]

(`geoip:database-info` [DB])

Returns a string containing information about the specified GeoIP database, including the type and release date. When called without an argument, returns information on the default database.

## 2.3 Country code lookup (2-letter)

`geoip:country-code-by-addr` [procedure]

(`geoip:country-code-by-addr` ADDR [DB])

Looks up a **2-letter ISO 3166-1** country code based on the specified IP address.

`geoip:country-code-by-name` [procedure]

(`geoip:country-code-by-name` NAME [DB])

Looks up a **2-letter ISO 3166-1** country code based on the specified hostname.

## 2.4 Country code lookup (3-letter)

`geoip:country-code3-by-addr` [procedure]

(`geoip:country-code3-by-addr` ADDR [DB])

Looks up a **3-letter ISO 3166-1** country code based on the specified IP address.

`geoip:country-code3-by-name` [procedure]

(`geoip:country-code3-by-name` NAME [DB])

Looks up a **3-letter ISO 3166-1** country code based on the specified hostname.

## 2.5 Country name lookup

`geoip:country-name-by-addr` [procedure]

(`geoip:country-name-by-addr` ADDR [DB])

Looks up a country name based on the specified IP address.

`geoip:country-name-by-name` [procedure]

(`geoip:country-name-by-name` NAME [DB])

Looks up a country name based on the specified hostname.

### 3 Examples

```
(use geoip)
```

```
(geoip:database-available? GEOIP-COUNTRY-EDITION) ; => #t
```

```
(geoip:database-available? GEOIP-ISP-EDITION)      ; => #f
```

```
(geoip:database-edition) ; => #\x1 (i.e. GEOIP-COUNTRY-EDITION)
```

```
(geoip:database-info) ; => "GEO-106FREE 20050901 Build 1 Copyright (c) 2005 MaxMind LLC"
```

```
(geoip:country-code-by-name "www.call-with-current-continuation.org") ; => "DE"
```

```
(geoip:country-code-by-addr "194.97.107.133") ; => "DE"
```

```
(geoip:country-code3-by-name "www.google.com") ; => "USA"
```

```
(geoip:country-name-by-name "www.bbc.co.uk") ; => "United Kingdom"
```

## 4 License

Copyright (c) 2006 Arto Bendiken. All rights reserved.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

This product includes GeoLite data created by MaxMind.

## Index

|                                   |   |                                 |   |
|-----------------------------------|---|---------------------------------|---|
| geoip:country-code-by-addr .....  | 3 | geoip:database-available? ..... | 3 |
| geoip:country-code-by-name .....  | 3 | geoip:database-edition .....    | 3 |
| geoip:country-code3-by-addr ..... | 3 | geoip:database-info .....       | 3 |
| geoip:country-code3-by-name ..... | 3 | geoip:open .....                | 2 |
| geoip:country-name-by-addr .....  | 3 | geoip:open-type .....           | 2 |
| geoip:country-name-by-name .....  | 3 |                                 |   |