Package 'countrycode'

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Title Convert Country Names and Country Codes

LazyData yes

Type Package

LazyLoad yes

Encoding UTF-8

Description Standardize country names, convert them into one of
eleven coding schemes, convert between coding schemes, and
assign region descriptors.

Version 1.1.2

URL https://github.com/vincentarelbundock/countrycode

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Depends R (>= 2.10)

Suggests testthat (>= 0.5)

RoxygenNote 7.1.0

NeedsCompilation no

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R topics documented:

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countrycode-package   *Convert Country Codes or Country Names*

Description

Convert country codes or country names

Details

The countrycode function can convert to and from several different country coding schemes. It uses regular expressions to convert country names (e.g. Sri Lanka) into any of those coding schemes, or into standardized country names in several languages. It can create variables with the name of the continent and/or several regional groupings to which each country belongs.

Type ?codelist to get a list of available origin and destination codes.

Author(s)

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References

http://arelbundock.com https://github.com/vincentarelbundock/countrycode

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cldr_examples   *List of CLDR country name codes and associated examples*

Description

- Code: CLDR code
- Example: French Southern Territories in different languages

Usage

    cldr_examples

Format

data frame

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codelist	*Country Code Translation Data Frame (Cross-Sectional)*

Description

A data frame used internally by the countrycode() function. 'countrycode' can use any valid code as destination, but only some codes can be used as origin.

Format

data frame with codes as columns

Details

Origin and Destination:

- country.name: country name (English)
- country.name.de: country name (German)
- cowc: Correlates of War character
- cown: Correlates of War numeric
- ecb: European Central Bank
- eurostat: Eurostat
- fao: Food and Agriculture Organization of the United Nations numerical code
- fips: FIPS 10-4 (Federal Information Processing Standard)
- gaul: Global Administrative Unit Layers
- genc2c: GENC 2-letter code
- genc3c: GENC 3-letter code
- genc3n: GENC numeric code
- gwc: Gleditsch & Ward character
- gwn: Gleditsch & Ward numeric
- imf: International Monetary Fund
- ioc: International Olympic Committee
- iso2c: ISO-2 character
- iso3c: ISO-3 character
- iso3n: ISO-3 numeric
- p4n: Polity IV numeric country code
- p4c: Polity IV character country code
- un: United Nations M49 numeric codes
- unpd: United Nations Procurement Division
- vdem: Varieties of Democracy (V-Dem version 8, April 2018)

- wb: World Bank (very similar but not identical to iso3c)
- wvs: World Values Survey numeric code

Destination only:

- ar5: IPCC's regional mapping used both in the Fifth Assessment Report (AR5) and for the Reference Concentration Pathways (RCP)
- continent: Continent as defined in the World Bank Development Indicators
- cow.name: Correlates of War country name
- ecb.name: European Central Bank country name
- eurocontrol_pru: European Organisation for the Safety of Air Navigation
- eurocontrol_statfor: European Organisation for the Safety of Air Navigation
- eurostat.name: Eurostat country name
- eu28: Member states of the European Union (as of December 2015), without special territories
- fao.name: Food and Agriculture Organization of the United Nations country name
- fips.name: FIPS 10-4 Country name
- genc.name: Geopolitical Entities, Names and Codes standard country names
- icao.name: International Civil Aviation Organization country name
- icao.region: International Civil Aviation Organization region
- ioc.name: International Olympic Committee country name
- iso.name.en: ISO English short name
- iso.name.fr: ISO French short name
- p4.name: Polity IV country name
- region: Regions as defined in the World Bank Development Indicators
- un.name.ar: United Nations Arabic country name
- un.name.en: United Nations English country name
- un.name.es: United Nations Spanish country name
- un.name.fr: United Nations French country name
- un.name.ru: United Nations Russian country name
- un.name.zh: United Nations Chinese country name
- unpd.name: United Nations Procurement Division country name
- wvs.name: World Values Survey numeric code country name
- cldr.*: 622 country name variants from the UNICODE CLDR project. Inspect the 'countrycode::cldr_examples' data.frame for a full list of available country names and examples.

Note

The Correlates of War (cow) and Polity 4 (p4) project produce codes in country year format. Some countries go through political transitions that justify changing codes over time. When building a purely cross-sectional conversion dictionary, this forces us to make arbitrary choices with respect to some entities (e.g., Western Germany, Vietnam, Serbia). 'countrycode' includes a reconciled dataset in panel format: 'countrycode::countrycode_panel'. Instead of converting code, we recommend that users dealing with panel data "left-merge" their data into this panel dictionary.

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codelist_panel	*Country Code Translation Data Frame (Country-Year Panel)*

Description

A panel of country-year observations with various codes

Usage

```
codelist_panel
```

Format

data frame with codes as columns

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countrycode	*Convert Country Codes*

Description

Converts long country names into one of many different coding schemes. Translates from one scheme to another. Converts country name or coding scheme to the official short English country name. Creates a new variable with the name of the continent or region to which each country belongs.

Usage

```
countrycode(
  sourcevar,
  origin,
  destination,
  warn = TRUE,
  nomatch = NA,
  custom_dict = NULL,
  custom_match = NULL,
  origin_regex = FALSE
)
```

Arguments

sourcevar	Vector which contains the codes or country names to be converted (character or factor)
origin	Coding scheme of origin (string such as "iso3c" enclosed in quotes ""): type "?codelist" for a list of available codes.

destination	Coding scheme of destination (string such as "iso3c" enclosed in quotes ""): type '?codelist' for a list of available codes.
warn	Prints unique elements from sourcevar for which no match was found
nomatch	When countrycode fails to find a match for the code of origin, it fills-in the destination vector with nomatch. The default behavior is to fill non-matching codes with NA. If nomatch = NULL, countrycode tries to use the origin vector to fill-in missing values in the destination vector. nomatch must be either NULL, of length 1, or of the same length as sourcevar.
custom_dict	A data frame which supplies custom country codes. Variables correspond to country codes, observations must refer to unique countries. When countrycode uses a user-supplied dictionary, no sanity checks are conducted. The data frame format must resemble countrycode::codelist.
custom_match	A named vector which supplies custom origin and destination matches that will supercede any matching default result. The name of each element will be used as the origin code, and the value of each element will be used as the destination code.
origin_regex	Logical: When using a custom dictionary, if TRUE then the origin codes will be matched as regex, if FALSE they will be matched exactly. When using the default dictionary (dictionary = NULL), origin_regex will be ignored.

Note

For a complete description of available country codes and languages, please read the documentation for the `codelist` conversion dictionary. Type: ?codelist.

Panel data (i.e., country-year) can pose particular problems when converting codes. For instance, some countries like Vietnam or Serbia go through political transitions that justify changing codes over time. This can pose problems when using codes from organizations like CoW or Polity IV, which produce codes in country-year format. Instead of converting codes using the 'countrycode' function, we recommend that users use the "countrycode::codelist_panel" data.frame as a base into which they can merge their other data. This data.frame includes most relevant code, and is already "reconciled" to ensure that each political unit is only represented by one row in any given year. From there, it is just a matter of using 'R''s 'merge' function to combine different datasets which use different codes.

Examples

```
# ISO to Correlates of War
countrycode(c('USA', 'DZA'), origin = 'iso3c', destination = 'cown')
# English to ISO
countrycode('Albania', origin = 'country.name', destination = 'iso3c')
# German to French
countrycode('Albanien', origin = 'country.name.de', destination = 'iso.name.fr')
```

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