

Package: igoR (via r-universe)

October 12, 2026

Title Access the Intergovernmental Organizations ('IGO') Database

Version 1.1.0

Description Provides tools for searching, extracting and recoding the Intergovernmental Organizations ('IGO') Database (version 3), distributed by the Correlates of War Project
<<https://correlatesofwar.org/>>. Includes 'IGO-year' and country-year membership data, state system data and functions for deriving 'dyad-year' joint membership results. For a description of the data, see Pevehouse, J. C. et al. (2020)
<[doi:10.1177/0022343319881175](https://doi.org/10.1177/0022343319881175)>.

License GPL (>= 3)

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<https://github.com/dieghernan/igoR>

BugReports <https://github.com/dieghernan/igoR/issues>

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igo_dyadic	<i>Extract dyad-year joint IGO membership</i>
------------	---

Description

Creates dyad-year IGO data. Each row represents a pair of states in one year and summarizes their joint memberships across IGOs.

Usage

```
igo_dyadic(country1, country2, year = 1816:2014, ioname = NULL)
```

Arguments

- country1, country2
- A state or a vector of states to compare. Each value can be any state name or Correlates of War code in [states2024](#).
- year
- An integer or vector of years to assess.
- ioname
- An optional IGO identifier or vector of identifiers. If NULL (the default), all IGOs are included. Use [igo_search\(\)](#) to find valid identifiers.

Details

The arguments `country1` and `country2` are named for compatibility with earlier versions of **igoR**. Values are matched against states in [states2024](#).

This function reproduces the structure of the original dyad-year file distributed by the Correlates of War Project (`dyadic_format3.dta`). That file is not included in this package due to its size.

The result contains one row for each dyad-year selected by `country1`, `country2` and year that is available for both states.

The `dyadid` column identifies each relationship and is computed as $(1000 * ccode1) + ccode2$.

For each selected IGO, the result includes a column named after its lowercase identifier and uses this coding scheme:

Category	Numerical value
No Joint Membership	0
Joint Full Membership	1
Missing data	-9
State Not System Member	-1

Use [igo_recode_dyadic\(\)](#) to recode the numerical values as **factors**.

If one state in an IGO is a full member but the other is an associate member or observer, that IGO is not coded as a joint membership.

Value

A [data.frame](#) with one row per state pair and year and one column per selected IGO. See **Details** for the membership status coding scheme. Returns NULL invisibly if no results are available.

Differences from the original data set

For some IGOs, results differ from the original data set in the coding of "Missing data" (-9) and "State Not System Member" (-1). The available documentation does not fully specify how to reproduce those values.

See [Codebook Version 3 IGO Data](#).

Source

[Codebook Version 3 IGO Data](#) for the full reference.

References

Pevehouse, J. C., Nordstrom, T., McManus, R. W. & Jamison, A. S. (2020). Tracking organizations in the world: The Correlates of War IGO Version 3.0 data sets. *Journal of Peace Research*, **57**(3), 492–503. doi:[10.1177/0022343319881175](#).

See Also

[igo_recode_dyadic\(\)](#) to recode results, [igo_search\(\)](#) to find IGO identifiers, [states2024](#) for state identifiers and [state_year_format3](#) for the source membership data.

Extract IGO membership data: [igo_members\(\)](#), [igo_state_membership\(\)](#)

Examples

```
usa_esp <- igo_dyadic("USA", "Spain")
nrow(usa_esp)
ncol(usa_esp)

dplyr::tibble(usa_esp)

# Use custom arguments.
custom <- igo_dyadic(
  country1 = c("France", "Germany"), country2 = c("Sweden", "Austria"),
  year = 1992:1993, ioname = "EU"
)

dplyr::glimpse(custom)
```

igo_members	<i>Extract IGO membership records by organization</i>
-------------	---

Description

Extracts state-level membership records for one or more IGOs and years.

Usage

```
igo_members(ioname, year = NULL, status = "Full Membership")
```

Arguments

ioname	An IGO identifier or vector of identifiers from igo_year_format3 . Use igo_search() to find valid identifiers.
year	An integer or vector of years to assess. If NULL, the latest available year for each IGO is used.
status	A character vector of membership statuses to extract from state-level IGO membership records. See state_year_format3 for valid statuses.

Value

A [data.frame](#) with one row per matching state, IGO and year, including the membership status. Returns NULL invisibly if no results are available.

Source

[Codebook Version 3 IGO Data](#) for the full reference.

References

Pevehouse, J. C., Nordstrom, T., McManus, R. W. & Jamison, A. S. (2020). Tracking organizations in the world: The Correlates of War IGO Version 3.0 data sets. *Journal of Peace Research*, **57**(3), 492–503. doi:[10.1177/0022343319881175](#).

See Also

[igo_search\(\)](#) to find IGO identifiers, [igo_year_format3](#) for IGO-year data and [state_year_format3](#) for state-year membership data.

Extract IGO membership data: [igo_dyadic\(\)](#), [igo_state_membership\(\)](#)

Examples

```
library(dplyr)
igo_members("EU", year = 1993) |> as_tibble()
igo_members("EU") |> as_tibble()
igo_members("NAFTA", year = c(1995:1998)) |> as_tibble()

# Extract multiple membership statuses.
igo_members("ACCT", status = c("Associate Membership", "Observer")) |>
  as_tibble()

# States that are not members of the UN.
igo_members("UN", status = "No Membership") |>
  as_tibble()

# Vectorized search.
igo_members(c("NAFTA", "EU"), year = 1993) |>
  as_tibble() |>
  arrange(state)

# Add country codes.
if (requireNamespace("countrycode", quietly = TRUE)) {
  library(countrycode)
  EU <- igo_members("EU")
  EU$iso3c <- countrycode(EU$ccode, origin = "cown", destination = "iso3c")

  EU$continent <- countrycode(EU$ccode,
    origin = "cown",
    destination = "continent"
  )

  tibble(EU)
}
```

igo_recode	<i>Recode membership status values</i>
------------	--

Description

Converts the numeric membership status values in `igo_year_format3`, `state_year_format3` and `igo_dyadic()` into [factors](#). Use `igo_recode_igoyear()` with values from `igo_year_format3`, `igo_recode_stateyear()` with values from `state_year_format3` and `igo_recode_dyadic()` with values from `igo_dyadic()`.

Usage

```
igo_recode_igoyear(x)
```

```
igo_recode_stateyear(x)
```

```
igo_recode_dyadic(x)
```

Arguments

`x` A numeric membership status value or vector of values to recode.

Value

A [factor](#) with the recoded membership status values.

See Also

[igo_year_format3](#), [state_year_format3](#) and [igo_dyadic\(\)](#) for the data corresponding to each recoding function.

Examples

```
data("igo_year_format3")

# Recode membership status values for selected states.
library(dplyr)

samp <- igo_year_format3 |>
  select(ioname:year, spain, france) |>
  filter(year > 2000) |>
  as_tibble()

glimpse(samp)

# Recode the membership columns.
samp |>
  mutate(
    spain = igo_recode_igoyear(spain),
    france = igo_recode_igoyear(france)
```

```
) |>
  glimpse()
```

 igo_search

Search for IGOs

Description

Searches for IGOs by name or regular expression.

Usage

```
igo_search(pattern = NULL, exact = FALSE)
```

Arguments

pattern A [regular expression](#) used to match IGO names and identifiers. If NULL, all IGOs in [igo_year_format3](#) are returned. Numeric identifiers are accepted.

exact A logical value. If TRUE, pattern is anchored to require a complete match.

Details

The information for each IGO is retrieved from the latest year available in [igo_year_format3](#). The label column provides a cleaned version of longorgname.

Value

A [data.frame](#) with IGO identifiers, names and other metadata from the latest available year for each IGO. Returns NULL invisibly if no results are available.

Source

[Codebook Version 3 IGO Data](#) for the full reference.

References

Pevehouse, J. C., Nordstrom, T., McManus, R. W. & Jamison, A. S. (2020). Tracking organizations in the world: The Correlates of War IGO Version 3.0 data sets. *Journal of Peace Research*, **57**(3), 492–503. doi:10.1177/0022343319881175.

See Also

[igo_year_format3](#) for the IGO metadata being searched.
Search IGO and state metadata: [igo_search_states\(\)](#)

Examples

```
# Return all values.
library(dplyr)
all <- igo_search()

all |> tibble()

# Search by pattern.
igo_search("EU") |>
  select(ionum:orgname) |>
  tibble()

igo_search("EU", exact = TRUE) |>
  select(ionum:orgname) |>
  tibble()

# Search by numeric identifier.
igo_search(10) |>
  select(ionum:orgname) |>
  tibble()

igo_search(10, exact = TRUE) |>
  select(ionum:orgname) |>
  tibble()

# Search with a regular expression.
igo_search("NAFTA|UN|EU") |>
  select(ionum:orgname) |>
  tibble()

# Search for several exact identifiers.
igo_search("^NAFTA$|^UN$|^EU$") |>
  select(ionum:orgname) |>
  tibble()
```

igo_search_states	<i>Find Correlates of War state codes, abbreviations and names</i>
-------------------	--

Description

Finds Correlates of War country codes, abbreviations and names for states.

Usage

```
igo_search_states(state)
```

Arguments

state A state name or code, or a vector of names or codes, as specified in [states2024](#).

Value

A `data.frame` with Correlates of War country codes, abbreviations, names and the matching state identifiers used by `state_year_format3`. Returns NULL invisibly if no results are available.

Source

[Codebook Version 3 IGO Data](#) for the full reference.

References

Pevehouse, J. C., Nordstrom, T., McManus, R. W. & Jamison, A. S. (2020). Tracking organizations in the world: The Correlates of War IGO Version 3.0 data sets. *Journal of Peace Research*, **57**(3), 492–503. doi:10.1177/0022343319881175.

See Also

[states2024](#) for state codes, abbreviations and names.

Search IGO and state metadata: [igo_search\(\)](#)

Examples

```
library(dplyr)

igo_search_states("Spain") |> as_tibble()

igo_search_states(c(20, 150)) |> as_tibble()

igo_search_states("congo") |> as_tibble()

igo_search_states(c("Germany", "papal states")) |> as_tibble()

igo_search_states(c("FRN", "United Kingdom", 240, "italy")) |> as_tibble()
```

`igo_state_membership` *Extract IGO membership records by state*

Description

Extracts IGO membership records for one or more states and years.

Usage

```
igo_state_membership(state, year = NULL, status = "Full Membership")
```

Arguments

state	A state name or code, or a vector of names or codes, as specified in states2024 .
year	An integer or vector of years to assess. If NULL, the latest available year for each state is used.
status	A character vector of membership statuses to extract from IGO-level state membership records. See igo_year_format3 for valid statuses.

Value

A [data.frame](#) with one row per matching state, IGO and year, including the membership status. Returns NULL invisibly if no results are available.

Source

[Codebook Version 3 IGO Data](#) for the full reference.

References

Pevhouse, J. C., Nordstrom, T., McManus, R. W. & Jamison, A. S. (2020). Tracking organizations in the world: The Correlates of War IGO Version 3.0 data sets. *Journal of Peace Research*, **57**(3), 492–503. doi:[10.1177/0022343319881175](#).

See Also

[igo_search_states\(\)](#) to find state identifiers, [igo_year_format3](#) for IGO-year membership data and [states2024](#) for state metadata.

Extract IGO membership data: [igo_dyadic\(\)](#), [igo_members\(\)](#)

Examples

```
# Memberships in selected years.
igo_state_membership("Spain", year = 1850)
igo_state_membership("Spain", year = 1870)
igo_state_membership("Spain", year = 1880:1882)

# Use the latest available year.
igo_state_membership("ZAN")[, 1:7]

# Search by state code.
igo_state_membership("2", year = 1865)

# Extract multiple membership statuses.
igo_state_membership("kosovo", status = c(
  "Associate Membership", "Observer",
  "Full Membership"
))

# Vectorized search.
igo_state_membership(c("usa", "spain"), year = 1870:1871)
```

```
# Add country codes.
if (requireNamespace("countrycode", quietly = TRUE)) {
  library(countrycode)
  IT <- igo_state_membership("Italy", year = 1880)
  IT$iso3c <- countrycode(IT$ccode, origin = "cown", destination = "iso3c")
  head(IT)
}
```

igo_year_format3 *IGO-year membership data*

Description

Data on intergovernmental organizations (IGOs) from 1816 to 2014 at the IGO-year level. Each row represents one IGO in one year. Years are recorded at five-year intervals through 1965 and annually thereafter.

Format

A [data.frame](#) with 19,335 rows. Relevant fields:

- `ioname`: Short identifier for the IGO name.
- `orgname`: Full IGO name.
- `year`: Calendar year.
- `afghanistan...zimbabwe`: Membership status of each state in the IGO. See the **Details** section.
- `sdate`: Start year for the IGO.
- `deaddate`: End year for the IGO.
- `longorgname`: Longer IGO name, including previous names.
- `ionum`: IGO identifier in versions 2.1 and 3.0 of the data.
- `version`: Correlates of War version number.

Details

Possible values for the status of a state in the IGO are:

Category	Numerical value
No Membership	0
Full Membership	1
Associate Membership	2
Observer	3
Missing data	-9
State Not System Member	-1

Use [igo_recode_igoyear\(\)](#) to recode the numerical values as [factors](#).

Note

Data distributed with **igoR**.

Source

Intergovernmental Organizations (version 3), IGO Data Stata files from the Correlates of War Project.

See the **Codebook Version 3 IGO Data** for the full reference.

References

Pevehouse, J. C., Nordstrom, T., McManus, R. W. & Jamison, A. S. (2020). Tracking organizations in the world: The Correlates of War IGO Version 3.0 data sets. *Journal of Peace Research*, **57**(3), 492–503. doi:10.1177/0022343319881175.

See Also

IGO data sets: [state_year_format3](#), [states2024](#)

Examples

```
data("igo_year_format3")

# Show a glimpse.
library(dplyr)

igo_year_format3 |>
  select(ioname:year, spain, france) |>
  filter(year > 1990) |>
  glimpse()

# Prepare a sample of numerical membership values.
sample_igo_year <- igo_year_format3 |>
  as_tibble() |>
  select(ioname:year, spain, france) |>
  filter(year == 1990)

sample_igo_year |> glimpse()

# Recode the membership columns.
sample_igo_year_recoded <- sample_igo_year |>
  mutate(across(c(spain, france), igo_recode_igoyear))

sample_igo_year_recoded |> glimpse()
```

state_year_format3	<i>Country-year IGO membership data</i>
--------------------	---

Description

Data on IGO membership from 1816 to 2014 at the country-year level. Each row represents one country in one year. Years are recorded at five-year intervals through 1965 and annually thereafter.

Format

A `data.frame` with 15,557 rows. Relevant fields:

- `ccode`: Correlates of War country number. See [states2024](#).
- `year`: Calendar year.
- `state`: Abbreviated state name, identical to variable names in [igo_year_format3](#).
- `aaaid...wassen`: IGO variables containing state membership status. See the **Details** section.

Details

Possible values for the status of a state in the IGO are:

Category	Numerical value
No Membership	0
Full Membership	1
Associate Membership	2
Observer	3
Missing data	-9
IGO Not In Existence	-1

Use `igo_recode_stateyear()` to recode the numerical values as [factors](#).
See the [Codebook Version 3 IGO Data](#).

Note

Data distributed with **igoR**.

Source

[Intergovernmental Organizations \(version 3\)](#), IGO Data Stata files from the Correlates of War Project.
See the [Codebook Version 3 IGO Data](#) for the full reference.

References

Pevehouse, J. C., Nordstrom, T., McManus, R. W. & Jamison, A. S. (2020). Tracking organizations in the world: The Correlates of War IGO Version 3.0 data sets. *Journal of Peace Research*, **57**(3), 492–503. [doi:10.1177/0022343319881175](#).

See Also

`countrycode::countrycode()` to convert between different country code schemes.
IGO data sets: `igo_year_format3`, `states2024`

Examples

```
data("state_year_format3")
dplyr::tibble(state_year_format3)
```

states2024	<i>State system membership (v2024)</i>
------------	--

Description

A list of states with Correlates of War abbreviations and identifiers, plus the state field from `state_year_format3`.

Format

A `data.frame` with 244 rows and 11 variables:

`ccode` Correlates of War state number.
`stateabb` Correlates of War state abbreviation.
`statenme` Primary Correlates of War state name.
`styear` Beginning year of state tenure.
`stmonth` Beginning month of state tenure.
`stday` Beginning day of state tenure.
`endyear` Ending year of state tenure.
`endmonth` Ending month of state tenure.
`endday` Ending day of state tenure.
`version` Data file version number.
`state` Abbreviated state name as it appears in `state_year_format3`.

Details

This data set contains the states in the international system as updated and distributed by the Correlates of War Project.

It identifies states, their standard Correlates of War country code or state number, state abbreviations and dates of membership in the international system.

The Correlates of War Project includes a state in the international system from 1816 to 2024 according to the following criteria:

- **Before 1920**, the entity must have had a population greater than 500,000 and have had diplomatic missions at or above the rank of chargé d'affaires with Britain and France.
- **After 1920**, the entity must be a member of the League of Nations or the United Nations, or have a population greater than 500,000 and receive diplomatic missions from two major powers.

Note

The state variable was added to the original data to support comparisons across data sets in this package.

Source

State System Membership (v2024). The Correlates of War Project.

References

Correlates of War Project. 2025. "State System Membership, v2024." Online, <https://correlatesofwar.org/>.

See Also

IGO data sets: [igo_year_format3](#), [state_year_format3](#)

Examples

```
data("states2024")
dplyr::glimpse(states2024)
```

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