# Package 'nhlapi'

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Type Package

Title A Minimum-Dependency 'R' Interface to the 'NHL' API

Version 0.1.4

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**Description** Retrieves and processes the data exposed by the open 'NHL' API. This includes information on players, teams, games, tournaments, drafts, standings, schedules and other endpoints. A lower-level interface to access the data via URLs directly is also provided.

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SysDataCompression xz

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```
make_log
```

Create a log message

# Description

Create a log message

# Usage

```
make_log(
  msg,
   ...,
  type = "I",
  dtFormat = getOption("nhlapi_log_datetime"),
  newLine = FALSE,
  sep = " | ",
  collapse = " ",
  lineBreak = "$",
  endNewLine = FALSE
)
```

# Arguments

msg	character(1), to be logged.
	additional character() strings to be logged. Will be pasted to msg and collapsed using the collapse argument.
type	character(1) ideally 1 uppercase letter.

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dtFormat	<pre>character(1), passed to format for [Sys.time()]</pre>
newLine	logical(1), if TRUE, new line will be pasted. to the beginning of the message.
sep	character(1) string, to separate parts of the message.
collapse	character(1), to collapse msg and
lineBreak	character(1), replacing line breaks in msg.
endNewLine	logical(1), if TRUE, new line will be pasted to the end of the message.

#### Value

character(1), constructed log message.

#### Examples

```
nhlapi:::make_log("Dummy warning", type = "W")
```

```
nhl_awards
```

Retrieve metadata on NHL awards from the API

#### Description

Retrieve metadata on NHL awards from the API

#### Usage

nhl\_awards(awardIds = NULL)

#### Arguments

awardIds integer(), vector of one or more award ids or NULL (default) for all awards. The current set of valid ids seems to be 1:24.

# Value

data.frame, with information on awards, one row per award.

## Examples

```
## Not run:
    # Get information on all awards
    nhl_awards()
    # Get information on 3 historical awards
    nhl_awards(1:3)
```

## End(Not run)

nhl\_conferences

#### Description

Retrieve metadata on NHL conferences from the API

#### Usage

```
nhl_conferences(conferenceIds = NULL)
```

## Arguments

conferenceIds integer(), ids of the conferences or NULL (default) for all conferences As of end of 2019, the valid conference ids seem to be in the 1:7 range.

#### Value

data.frame, with information on conferences, one row per conference.

## Examples

```
## Not run:
    # Get information on all conferences
    nhl_conferences()
    # Get information on 2 selected conferences
    nhl_conferences(5:6)
```

```
## End(Not run)
```

nhl\_divisions

Retrieve metadata on NHL divisions from the API

#### Description

Retrieve metadata on NHL divisions from the API

## Usage

```
nhl_divisions(divisionIds = NULL)
```

#### Arguments

divisionIds integer(), ids of the divisions or NULL (default) for all divisions. As of end of 2019, the valid division ids seem to be in the 1:25 range.

## Value

data.frame, with information on divisions, one row per division.

## Examples

```
## Not run:
    # Get information on all divisions
    nhl_divisions()
    # Get information on 2 selected divisions
    nhl_divisions(15:16)
```

## End(Not run)

nhl\_drafts

#### Retrieve metadata on NHL drafts from the API

#### Description

Retrieve metadata on NHL drafts from the API

#### Usage

```
nhl_drafts(draftYears = NULL)
```

## Arguments

draftYears integer(), vector of one or more years in YYYY format or NULL (default) for the current year's draft. Also accepts a character vector of years in YYYY format.

#### Value

data.frame, with information on drafts, one row per draft year.

#### Examples

```
## Not run:
    # Get information on current draft
    nhl_drafts()
    # Get information on 3 historical drafts
    nhl_drafts(2015:2017)
```

## End(Not run)

nhl\_draft\_prospects Retrieve metadata on NHL draft prospects from the API

#### Description

Retrieve metadata on NHL draft prospects from the API

# Usage

```
nhl_draft_prospects(prospectIds = NULL)
```

#### Arguments

prospectIds integer(), vector of one or more ids of draft prospects or NULL (default) for all exposed prospects.

# Value

data.frame, with information on draft prospects, one row per draft prospect.

#### Examples

```
## Not run:
    # Get information on current draft prospects
    nhl_draft_prospects()
```

## End(Not run)

nhl\_from\_json Get URL using fromJSON

## Description

Get URL using fromJSON

#### Usage

```
nhl_from_json(
    url,
    flatten = getOption("nhlapi_flatten"),
    silent = getOption("nhlapi_try_silent"),
    retries = getOption("nhlapi_get_retries"),
    retrySleep = getOption("nhlapi_get_retry_sleep"),
    noRetryPatt = getOption("nhlapi_get_noretry")
)
```

#### Arguments

url	character(1), the URL to get the data from.
flatten	logical(1), if TRUE (default) automatically flattens nested data frames into a single non-nested data frame.
silent	logical(1), passed to [try()].
retries	integer(1), number of retries in case of failed data retrieval (0L for no no retries).
retrySleep	integer(1), number of seconds to [Sys.sleep()] in between retries.
noRetryPatt	character(1), string pattern. If the error condition's message contains this pattern, there will be no retries. Useful for e.g. 404 returns where retries are likely useless.

## Value

list, retrieved data if succeeded, a try-error class object otherwise.

```
nhl_games
```

Retrieve metadata on NHL games from the API

## Description

Retrieve metadata on NHL games from the API

#### Usage

```
nhl_games(gameIds, element)
```

- nhl\_games\_content(gameIds)
- nhl\_games\_feed(gameIds)
- nhl\_games\_boxscore(gameIds)
- nhl\_games\_linescore(gameIds)

#### Arguments

gameIds numeric(), vector of one or more game ids. The game id is a 10 digit number where the

- first 4 digits identify the season of the game, for instance 2017 for the 2017-2018 season.
- next 2 digits give the type of game, where
  - 01 preseason,
  - 02 regular season,

#### nhl\_games

- 03 playoffs,
- 04 all-star.
- final 4 digits identify the specific game number
  - for regular season and preseason games, this ranges from 0001 to the number of games played. That is 1271 for seasons with 31 teams and 1230 for seasons with 30 teams.
  - for playoff games, the
    - \* second digit gives the round of the playoffs
    - \* third digit specifies the match-up
    - \* fourth digit specifies the game (out of 7)

element character() vector of one or more valid elements. Currently the valid elements seem to be:

- "linescore"
- "boxscore"
- "content"
- "feed/live"

#### Value

list, with information on games, one element per game and element combination.

#### Functions

- nhl\_games\_content: Complex endpoint returning multiple types of media relating to the game including videos of shots, goals and saves.
- nhl\_games\_feed: returns all data about a specified game id including play data with on-ice coordinates and post-game details like first, second and third stars and details about shootouts. Note that the data returned is sizable, often over 30 000 lines.
- nhl\_games\_boxscore: Returns far less detail than nhl\_games\_feed() and may be more suitable for analyzing post-game statistics including goals, shots, penalty minutes, blocked, take-aways, etc.
- nhl\_games\_linescore: Returns even fewer details than nhl\_games\_boxscore(). Has goals, shots on goal, power-play and goalie pulled status, number of skaters and shootout information if applicable.

## Examples

```
## Not run:
    # Get content for one game
    nhl_games(2017010001, "content")
    # Get both box score and content for 2 games
    nhl_games(c(2017010001, 2017010002), c("content", "boxscore"))
    # Get content for a game
    nhl_games_content(2017010001)
```

```
# Get the game feed for a game
nhl_games_feed(2017010001)
# Get the box score for a game
nhl_games_boxscore(2017010001)
# Get the line score for a game
nhl_games_linescore(2017010001)
```

## End(Not run)

nhl\_get\_data

Get data from the API for one or more URLs

## Description

Get data from the API for one or more URLs

#### Usage

nhl\_get\_data(urls, flatten = getOption("nhlapi\_flatten"))

## Arguments

urls	character(), vector of URLs to retrieve the data from.
flatten	logical(1), if TRUE (default) automatically flattens nested data frames into a single non-nested data frame.

# Value

list, results retrieved using nhl\_get\_data\_worker(). One element per url. The elements contain the retrieved data if retrieval succeeded, otherwise an nhl\_get\_data\_error class object.

## See Also

nhl\_get\_data\_worker()

## Examples

```
## Not run:
nhl_get_data(c(
    "https://statsapi.web.nhl.com/api/v1/teams/1",
    "https://statsapi.web.nhl.com/api/v1/people/8477474"
))
nhl_get_data(
    "https://statsapi.web.nhl.com/api/v1/teams/1",
```

)

```
## End(Not run)
```

nhl\_get\_data\_worker Get data from the API for 1 URL

#### Description

Gets data from the NHL API using nhl\_from\_json().

## Usage

```
nhl_get_data_worker(
    url,
    flatten = getOption("nhlapi_flatten"),
    silent = getOption("nhlapi_try_silent"),
    retries = getOption("nhlapi_get_retries"),
    retrySleep = getOption("nhlapi_get_retry_sleep")
)
```

## Arguments

url	character(1), the URL to get the data from.
flatten	logical(1), if TRUE (default) automatically flattens nested data frames into a single non-nested data frame.
silent	logical(1), passed to [try()].
retries	integer(1), number of retries in case of failed data retrieval (0L for no no retries).
retrySleep	<pre>integer(1), number of seconds to [Sys.sleep()] in between retries.</pre>

## Value

list, with the retrieved data or class nhl\_get\_data\_error.

## See Also

nhl\_from\_json(), nhl\_url()

nhl\_make\_seasons

#### Description

The NHL API wants seasons defined in format "YYYYZZZZ" where ZZZZ = YYYY + 1. This is a helper to take a vector of years in "YYYY" format and create a vector of such seasons to be used with the API.

#### Usage

```
nhl_make_seasons(seasons = 1950:2019)
```

#### Arguments

```
seasons
numeric(), integer() or character(), vector of starting years of desired seasons in YYYY format, e.g. 1995 or "1995" for season 1995-1996. Accepts vectors such as c(1995:2000, 2010) to generate multiple seasons.
Alternatively, also accepts character() with seasons in the format "YYYYZZZZ", where ZZZZ = YYYY + 1, e.g. "19951996". This is the format that ultimately gets sent to the NHL API.
Some API endpoints, notably seasons exposed via nhl_seasons() also allow the value "current" to passed. This value will be returned unchanged.
```

## Value

character(), vector of seasons suited for the NHL API.

#### Examples

```
nhlapi:::nhl_make_seasons()
nhlapi:::nhl_make_seasons(1995:2000)
nhlapi:::nhl_make_seasons(c(1995, 2015))
nhlapi:::nhl_make_seasons(c("1995", "2015"))
```

nhl\_md\_event\_types Get event types metadata

# Description

Get event types metadata

#### Usage

nhl\_md\_event\_types()

# Value

list, with metadata on event types.

nhl\_md\_game\_statuses Get game status metadata

## Description

Get game status metadata

## Usage

nhl\_md\_game\_statuses()

# Value

list, with metadata on game statuses.

nhl\_md\_game\_types Get game type metadata

## Description

Get game type metadata

# Usage

```
nhl_md_game_types()
```

# Value

list, with metadata on game types.

nhl\_md\_play\_types Get play types metadata

# Description

Get play types metadata

## Usage

```
nhl_md_play_types()
```

## Value

list, with metadata on play types.

nhl\_md\_standings\_types

Get standings types metadata

## Description

Get standings types metadata

## Usage

nhl\_md\_standings\_types()

## Value

list, with metadata on standings types.

nhl\_md\_stat\_types Get stat types metadata

## Description

Get stat types metadata

#### Usage

nhl\_md\_stat\_types()

# Value

list, with metadata on stat types.

nhl\_md\_tournament\_types

Get tournament types metadata

# Description

Get tournament types metadata

## Usage

nhl\_md\_tournament\_types()

#### Value

list, with metadata on tournament types.

#### Description

Retrieves information on players from the NHL API based on playerNames or playerIds. If playerNames are provided, they take precedence over playerIds.

#### Usage

nhl\_players(playerNames, playerIds = NULL)

# Arguments

playerNames	character(), vector of one or more player names. Not case sensitive for convenience.
playerIds	integer(), vector of one or more ids of the players. The ids correspond to the ids expected by the NHL API people endpoint. For most cases the playerNames argument can be provided for more convenient usage.

#### Value

data.frame, with information on selected players.

#### Examples

```
## Not run:
# With player names
nhl_players(c("joe SAKIC", "patrick roy"))
# With playerIds
nhl_players(playerIds = c(8451101, 8458554))
```

## End(Not run)

nhl\_players\_allseasons

```
Retrieve all seasons statistics for players
```

## Description

Retrieve all seasons statistics for players

#### Usage

```
nhl_players_allseasons(playerNames, playerIds = NULL)
```

# Arguments

playerNames	character(), vector of one or more player names. Not case sensitive for convenience.
playerIds	integer(), vector of one or more ids of the players. The ids correspond to the ids expected by the NHL API people endpoint. For most cases the playerNames argument can be provided for more convenient usage.

# Value

data.frame, with all season statistics for selected players.

## Examples

```
## Not run:
# With player names
nhl_players_allseasons(c("joe sakic", "Peter Forsberg"))
# With player ids
nhl_players_allseasons(c(8451101, 8458554))
```

```
## End(Not run)
```

nhl\_players\_seasons Retrieve selected seasons statistics for players

# Description

Retrieve selected seasons statistics for players

## Usage

```
nhl_players_seasons(playerNames, seasons, playerIds = NULL, playoffs = FALSE)
```

# Arguments

playerNames	character(), vector of one or more player names. Not case sensitive for convenience.
seasons	numeric(), integer() or character(), vector of starting years of desired seasons in YYYY format, e.g. 1995 or "1995" for season 1995-1996. Accepts vectors such as c(1995:2000, 2010) to generate multiple seasons.
	Alternatively, also accepts character() with seasons in the format "YYYYZZZZ", where ZZZZ = YYYY + 1, e.g. "19951996". This is the format that ultimately gets sent to the NHL API.
	Some API endpoints, notably seasons exposed via nhl_seasons() also allow the value "current" to passed. This value will be returned unchanged.

playerIds	integer(), vector of one or more ids of the players. The ids correspond to the ids expected by the NHL API people endpoint. For most cases the playerNames argument can be provided for more convenient usage.
playoffs	logical(1), if FALSE (default) get the regular seasons data, if TRUE, get the data for the playoffs.

# Value

data.frame, with selected season statistics for selected players.

#### Examples

```
## Not run:
nhl_players_seasons(
    playerIds = c(8451101, 8458554),
    seasons = "19951996",
    playoffs = TRUE
)
## End(Not run)
```

nhl\_plot\_rink Plot an NHL rink

#### Description

Initialize a plot in base graphics with a to-scale NHL rink as the background

#### Usage

```
nhl_plot_rink()
```

#### Details

The placement of rink features & their sizes are exact according to the NHL rule book; see citation.

# Examples

```
## Not run:
    # Retrieve some game feed data
    gameFeeds <- lapply(
        2019010001:2019010010,
        nhlapi::nhl_games_feed
    )
    # Create a data.frame with plays
    getPlaysDf <- function(gm) {
        playsRes <- try(gm[[1L]][["liveData"]][["plays"]][["allPlays"]])
        if (inherits(playsRes, "try-error")) data.frame() else playsRes
```

```
}
plays <- lapply(gameFeeds, getPlaysDf)
plays <- nhlapi:::util_rbindlist(plays)
plays <- plays[!is.na(plays$coordinates.x), ]
# Move the coordinates to non-negative values before plotting
plays$coordx <- plays$coordinates.x + abs(min(plays$coordinates.x))
plays$coordy <- plays$coordinates.y + abs(min(plays$coordinates.y))
# Select goals only
goals <- plays[plays$result.event == "Goal", ]
# Create the plot and add goals
nhlapi::plot_rink()
points(goals$coordinates.x, goals$coordinates.y)
## End(Not run)</pre>
```

```
nhl_schedule
```

Retrieve metadata on NHL schedule from the API

#### Description

The general-purpose nhl\_schedule() exposes many parameters, some useful helpers are exposed as separate functions to reflect common use cases. Arguments can be passed to these named via ....

- nhl\_schedule\_today()
- nhl\_schedule\_seasons()
- nhl\_schedule\_date\_range()

#### Usage

```
nhl_schedule(
    seasons = NULL,
    teamIds = NULL,
    startDate = NULL,
    endDate = NULL,
    gameTypes = NULL,
    expand = NULL
)
nhl_schedule_today(...)
nhl_schedule_seasons(seasons, ...)
nhl_schedule_date_range(startDate, endDate, ...)
```

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## nhl\_schedule

#### Arguments

seasons	numeric(), integer() or character(), vector of starting years of desired sea- sons in YYYY format, e.g. 1995 or "1995" for season 1995-1996. Accepts vectors such as c(1995:2000, 2010) to generate multiple seasons.
	Alternatively, also accepts character() with seasons in the format "YYYYZZZZ", where ZZZZ = YYYY + 1, e.g. "19951996". This is the format that ultimately gets sent to the NHL API.
	Some API endpoints, notably seasons exposed via nhl_seasons() also allow the value "current" to passed. This value will be returned unchanged.
teamIds	integer(), ids of the teams or NULL (default) for all teams. As of end of 2019, the valid team ids seem to be in the 1:54 range.
startDate	character(1), date in the format "YYYY-MM-DD" defining the start of the date interval for which the schedule is to be retrieved.
endDate	character(1), date in the format "YYYY-MM-DD" defining the end of the date interval for which the schedule is to be retrieved.
gameTypes	character(), defining the game types to retrieve. Valid game types are for example "R" for regular season or "P" for playoffs. See nhl_md_game_types() for all values and their descriptions.
expand	character(), of parameters passed as expand to the API URL. Some valid ex- amples seem to be "round.series" and "schedule.broadcasts", "schedule.linescore", "schedule.ticket". NULL for no expand parameter.
	other named parameters passed to nhl_schedule().

## Value

list, with information on schedule, depending on provided arguments.

#### Functions

- nhl\_schedule\_today: Shortcut to get information on today's schedule.
- nhl\_schedule\_seasons: Shortcut to get information on schedule for one or more seasons.
- nhl\_schedule\_date\_range: Shortcut to get information on schedule for a range of dates in "YYYY-MM-DD" format.

# Examples

```
## Not run:
# Get current schedule
nhl_schedule()
# Get schedule for historical seasons
nhl_schedule(seasons = 2015:2016)
# Get schedule for a date range
nhl_schedule(startDate = "2018-01-02", endDate = "2018-01-02")
# Get schedule for a date range, specific teams
```

```
# and expand on line scores
nhl_schedule(
  startDate = "2018-01-02",
  endDate = "2018-01-02",
  teamIds = c(29, 30),
  expand = "schedule.linescore"
)
## End(Not run)
## Not run:
 nhl_schedule_today()
## End(Not run)
## Not run:
 # Schedule for seasons starting in 2015 and 2016
 nhl_schedule_seasons(2015:2016)
 # Schedule for seasons starting in 2015 and 2016
 # Only 1 team and expand line scores
 nhl_schedule_seasons(
    2015:2016,
   teamIds = 1,
   expand = "schedule.linescore"
 )
## End(Not run)
## Not run:
 # Schedule for October and November 2015
 nhl_schedule_date_range(
   startDate = "2015-10-01",
   endDate = "2015-11-30"
 )
 # Schedule for October and November 2015
 # Regular seasons only, specific team and expand line scores
 nhl_schedule_date_range(
   startDate = "2015-10-01", endDate = "2015-11-30",
   gameTypes = "R",
    teamIds = 2,
    expand = "schedule.linescore"
 )
## End(Not run)
```

nhl\_seasons

Retrieve metadata on NHL seasons from the API

#### Description

Retrieve metadata on NHL seasons from the API

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## nhl\_standings

#### Usage

nhl\_seasons(seasons = NULL)

#### Arguments

seasons	numeric(), integer() or character(), vector of starting years of desired sea- sons in YYYY format, e.g. 1995 or "1995" for season 1995-1996. Accepts vectors such as c(1995:2000, 2010) to generate multiple seasons.
	Alternatively, also accepts character() with seasons in the format "YYYYZZZZ", where ZZZZ = YYYY + 1, e.g. "19951996". This is the format that ultimately gets sent to the NHL API.
	Some API endpoints, notably seasons exposed via nhl_seasons() also allow the value "current" to passed. This value will be returned unchanged.

#### Value

data.frame, with information on seasons, one row per year.

#### Examples

```
## Not run:
    # Get information on all seasons
    nhl_seasons()
    # Get information on 3 historical seasons
    nhl_seasons(2015:2017)
```

## End(Not run)

nhl\_standings Retrieve metadata on NHL standings from the API

## Description

Retrieve metadata on NHL standings from the API

#### Usage

```
nhl_standings(seasons = NULL, standingsTypes = NULL, expand = NULL)
```

#### Arguments

```
    seasons
    numeric(), integer() or character(), vector of starting years of desired seasons in YYYY format, e.g. 1995 or "1995" for season 1995-1996. Accepts vectors such as c(1995:2000, 2010) to generate multiple seasons.
    Alternatively, also accepts character() with seasons in the format "YYYYZZZZ", where ZZZZ = YYYY + 1, e.g. "19951996". This is the format that ultimately gets sent to the NHL API.
```

	Some API endpoints, notably seasons exposed via nhl_seasons() also allow the value "current" to passed. This value will be returned unchanged.
standingsTypes	character(), defining the standings types to retrieve. Valid standings types are for example "regularSeason" or "byDivision". See nhl_md_standings_types() for all values and their descriptions.
expand	character(), of parameters passed as expand to the API URL. A valid example seems to be "standings.record". NULL for no expand parameter.

## Value

list, with information on standings depending on provided arguments.

#### Examples

```
## Not run:
# Get current standings
nhl_standings()
# Get standings for historical seasons
nhl_standings(seasons = 2015:2016)
# Get standings for historical seasons
nhl_standings(
    seasons = 2015:2016,
    standingsType = "byDivision",
    expand = "standings.record"
)
## End(Not run)
```

```
nhl_teams
```

Retrieve metadata on NHL teams from the API

#### Description

Retrieves team metadata such as the teams names, abbreviations, locations, conferences, venues, etc.

#### Usage

```
nhl_teams(teamIds = NULL, params = NULL)
```

## Arguments

teamIds	integer(), ids of the teams or NULL (default) for all teams. As of end of 2019,
	the valid team ids seem to be in the 1:54 range.
params	named list(), further parameters passed to nhl_url_teams.

## Details

The API allows to retrieve data on all teams at once, which is achieved by the default NULL value for the team id.

# Value

data.frame, with data on teams, one row per team.

# Examples

```
## Not run:
    nhl_teams()
    nhl_teams(1:3)
```

## End(Not run)

nhl\_teams\_rosters Get rosters for teams

# Description

Get rosters for teams

## Usage

```
nhl_teams_rosters(teamIds = NULL, seasons = NULL)
```

## Arguments

teamIds	integer(), ids of the teams or NULL (default) for all teams. As of end of 2019, the valid team ids seem to be in the 1:54 range.
seasons	numeric(), integer() or character(), vector of starting years of desired sea- sons in YYYY format, e.g. 1995 or "1995" for season 1995-1996. Accepts vectors such as c(1995:2000, 2010) to generate multiple seasons.
	Alternatively, also accepts character() with seasons in the format "YYYYZZZZ", where ZZZZ = YYYY + 1, e.g. "19951996". This is the format that ultimately gets sent to the NHL API.
	Some API endpoints, notably seasons exposed via nhl_seasons() also allow the value "current" to passed. This value will be returned unchanged.

#### Value

data.frame, with an element called roster.roster that in itself is a data.frame with the roster data.

#### Examples

```
## Not run:
# Current rosters for all teams
nhl_teams_rosters()
# Rosters for all teams for past seasons
nhl_teams_rosters(seasons = c("19931994", "19931994"))
# Roster for Devils and Islanders
nhl_teams_rosters(
    teamIds = 1:2,
    seasons = c("19931994", "19931994")
)
## End(Not run)
```

nhl\_teams\_shedule\_next

Get details for the teams' upcoming game

# Description

Get details for the teams' upcoming game

#### Usage

```
nhl_teams_shedule_next(teamIds = NULL)
```

#### Arguments

teamIds integer(), ids of the teams or NULL (default) for all teams. As of end of 2019, the valid team ids seem to be in the 1:54 range.

# Value

data.frame, with elements with names starting with nextGameSchedule that contain data on the teams' upcoming game. One row per team.

#### Examples

```
## Not run:
# Next game for all teams
nhl_teams_shedule_next()
# Next game for selected teams
nhl_teams_shedule_next(c(1,3,5))
```

## End(Not run)

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nhl\_teams\_shedule\_previous

Get details for the teams' previous game

## Description

Get details for the teams' previous game

#### Usage

```
nhl_teams_shedule_previous(teamIds = NULL)
```

## Arguments

teamIds	integer(), ids of the teams or NULL (default) for all teams. As of end of 2019,
	the valid team ids seem to be in the 1:54 range.

#### Value

data.frame, with elements with names starting with previousGameSchedule that contain data on the teams' previous game. One row per team.

#### Examples

```
## Not run:
    # Next game for all teams
    nhl_teams_shedule_previous()
    # Next game for selected teams
    nhl_teams_shedule_previous(c(1,3,5))
```

## End(Not run)

nhl\_teams\_stats Get team statistics per seasons

## Description

Get team statistics per seasons

#### Usage

```
nhl_teams_stats(teamIds = NULL, seasons = NULL)
```

## Arguments

teamIds	integer(), ids of the teams or NULL (default) for all teams. As of end of 2019, the valid team ids seem to be in the 1:54 range.
seasons	numeric(), integer() or character(), vector of starting years of desired seasons in YYYY format, e.g. 1995 or "1995" for season 1995-1996. Accepts vectors such as c(1995:2000, 2010) to generate multiple seasons.
	Alternatively, also accepts character() with seasons in the format "YYYYZZZZ", where ZZZZ = YYYY + 1, e.g. "19951996". This is the format that ultimately gets sent to the NHL API.
	Some API endpoints, notably seasons exposed via nhl_seasons() also allow the value "current" to passed. This value will be returned unchanged.

## Value

data.frame, with seasons statistics for the selected team(s), one row per each team and season combination.

#### Examples

```
## Not run:
    # All teams, current seasons
    nhl_teams_stats()
    # 2 teams, 3 seasons
    nhl_teams_stats(1:2, c("20052006", "20062007", "20072008"))
```

## End(Not run)

nhl\_tournaments Retrieve data on tournaments from the API

## Description

Retrieve data on tournaments from the API

#### Usage

```
nhl_tournaments(tournamentTypes, seasons = NULL, expand = NULL)
nhl_tournaments_playoffs(seasons = NULL, expand = NULL)
nhl_tournaments_olympics(seasons = NULL, expand = NULL)
nhl_tournaments_worldcups(seasons = NULL, expand = NULL)
```

#### Arguments

tournamentTypes

character(), vector of one or more tournament types. Currently supported types seem to be

- "playoffs"
- "olympics"
- "worldCup"

Those are exposed via shorthand functions

- nhl\_tournaments\_playoffs()
- nhl\_tournaments\_olympics()
- nhl\_tournaments\_worldcups()

seasons	numeric(), integer() or character(), vector of starting years of desired sea- sons in YYYY format, e.g. 1995 or "1995" for season 1995-1996. Accepts vectors such as c(1995:2000, 2010) to generate multiple seasons.
	Alternatively, also accepts character() with seasons in the format "YYYYZZZZ", where ZZZZ = YYYY + 1, e.g. "19951996". This is the format that ultimately gets sent to the NHL API.
	Some API endpoints, notably seasons exposed via nhl_seasons() also allow the value "current" to passed. This value will be returned unchanged.
expand	character(), of parameters passed as expand to the API URL. Two valid ex- amples seem to be "round.series" and "schedule.game.seriesSummary". NULL for no expand parameter.

# Value

list, with information on tournaments, one element per tournamentTypes and parameters (seasons and expand) combinations.

## Functions

- nhl\_tournaments\_playoffs: Shortcut to get information on playoffs.
- nhl\_tournaments\_olympics: Shortcut to get information on Olympics.
- nhl\_tournaments\_worldcups: Shortcut to get information on world cups.

## Examples

```
## Not run:
    # Get info on playoffs in one season
    nhl_tournaments("playoffs", 2015)
    # Get info on playoffs in 2 seasons, expand rounds
    nhl_tournaments("playoffs", 2015:2016, "round.series")
## End(Not run)
## Not run:
```

## nhl\_url

```
nhl_tournaments_playoffs(2015:2016, "round.series")
## End(Not run)
## Not run:
    nhl_tournaments_olympics(2009, "round.series")
## End(Not run)
## Not run:
    nhl_tournaments_worldcups(2003)
```

## End(Not run)

nhl\_url

#### Create an NHL API URL

## Description

Create an NHL API URL

## Usage

```
nhl_url(
  endPoint = NULL,
  suffixes = NULL,
  params = NULL,
  baseUrl = getOption("nhlapi_baseurl")
)
```

# Arguments

endPoint	character(1), the API endpoint.
suffixes	list(), of suffixes that will be concatenated to the end of the URLs, separated by /.
params	named list() of parameters that will be concatenated to the end of the URLs after ?. Parameters can have multiple values, in which case multiple URLs are created. Multiple parameters are separated by &.
baseUrl	character(1), URL of the NHL API base location.

#### Value

character(), the created URLs.

## Examples

nhlapi:::nhl\_url("people", "8477474")

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nhl\_url\_add\_params Add parameters to URLs

## Description

Add parameters to URLs

## Usage

```
nhl_url_add_params(url, params = NULL)
```

#### Arguments

url	character(), vector of URLs.
params	named list() of parameters that will be concatenated to the end of the URLs after ?. Parameters can have multiple values, in which case multiple URLs are
	created. Multiple parameters are separated by &.

## Value

character(), URLs with parameters added. Same length as all the combinations of url and params.

# Description

Add suffixes to URLs

#### Usage

```
nhl_url_add_suffixes(url, suffixes)
```

#### Arguments

url	character(), vector of URLs.
suffixes	list(), of suffixes that will be concatenated to the end of the URLs, separated by /.

# Value

character(), URLs with suffixes added. Same length as all the combinations of url and suffixes.

nhl\_url\_awards

#### Description

Create an NHL API URL for awards

# Usage

nhl\_url\_awards(awardIds = NULL)

#### Arguments

awardIds integer(), vector of one or more award ids or NULL (default) for all awards. The current set of valid ids seems to be 1:24.

# Value

character(), API URLs, same length as awardIds or length 1 if awardIds is NULL.

#### Examples

```
nhlapi:::nhl_url_awards()
nhlapi:::nhl_url_awards(1:3)
```

nhl\_url\_conferences Create an NHL API URL for conferences

#### Description

Create an NHL API URL for conferences

#### Usage

```
nhl_url_conferences(conferenceIds = NULL)
```

# Arguments

conferenceIds integer(), ids of the conferences or NULL (default) for all conferences As of end of 2019, the valid conference ids seem to be in the 1:7 range.

#### Value

character(), API URLs, same length as teamIds or length 1 if teamIds is NULL.

## nhl\_url\_divisions

#### Examples

```
nhlapi:::nhl_url_conferences()
nhlapi:::nhl_url_conferences(1:3)
```

nhl\_url\_divisions Create an NHL API URL for divisions

#### Description

Create an NHL API URL for divisions

#### Usage

```
nhl_url_divisions(divisionIds = NULL)
```

#### Arguments

divisionIds integer(), ids of the divisions or NULL (default) for all divisions. As of end of 2019, the valid division ids seem to be in the 1:25 range.

## Value

character(), of same length as teamIds or length 1 if teamIds is NULL.

#### Examples

```
nhlapi:::nhl_url_divisions()
nhlapi:::nhl_url_divisions(1:3)
```

nhl\_url\_drafts Create an NHL API URL for drafts

## Description

Create an NHL API URL for drafts

#### Usage

```
nhl_url_drafts(draftYears = NULL)
```

#### Arguments

draftYears integer(), vector of one or more years in YYYY format or NULL (default) for the current year's draft. Also accepts a character vector of years in YYYY format.

character(), API URLs, same length as draftYears or length 1 if draftYears is NULL.

# Examples

```
nhlapi:::nhl_url_drafts()
nhlapi:::nhl_url_drafts(2015:2017)
```

nhl\_url\_draft\_prospects

Create an NHL API URL for draft prospects

# Description

Create an NHL API URL for draft prospects

#### Usage

nhl\_url\_draft\_prospects(prospectIds = NULL)

#### Arguments

prospectIds integer(), vector of one or more ids of draft prospects or NULL (default) for all exposed prospects.

## Value

character(), API URLs, same length as prospectIds or length 1 if prospectIds is NULL.

# Examples

nhlapi:::nhl\_url\_draft\_prospects()

nhl\_url\_games

# Description

Create an NHL API URL for games

# Usage

nhl\_url\_games(gameIds, element)

## Arguments

gameIds	numeric(), vector of one or more game ids. The game id is a 10 digit number where the
	• first 4 digits identify the season of the game, for instance 2017 for the 2017-2018 season.
	• next 2 digits give the type of game, where
	– 01 - preseason,
	– 02 - regular season,
	– 03 - playoffs,
	<b>–</b> 04 - all-star.
	• final 4 digits identify the specific game number
	<ul> <li>for regular season and preseason games, this ranges from 0001 to the number of games played. That is 1271 for seasons with 31 teams and 1230 for seasons with 30 teams.</li> </ul>
	– for playoff games, the
	<ul><li>* second digit gives the round of the playoffs</li></ul>
	* third digit specifies the match-up
	* fourth digit specifies the game (out of 7)
element	character() vector of one or more valid elements. Currently the valid elements seem to be:
	• "linescore"
	• "boxscore"
	• "content"
	<ul><li>"feed/live"</li></ul>

# Value

character(), of same length as gameIds.

#### Examples

```
nhlapi:::nhl_url_games(2017010001, "content")
nhlapi:::nhl_url_games(
    c(2017010001, 2017010002),
    c("content", "boxscore")
)
```

nhl\_url\_players Create an NHL API URL for players

## Description

Create an NHL API URL for players

#### Usage

```
nhl_url_players(playerIds)
```

## Arguments

playerIds integer(), vector of one or more ids of the players. The ids correspond to the ids expected by the NHL API people endpoint. For most cases the playerNames argument can be provided for more convenient usage.

## Value

character(), API URLs, same length as playerIds.

## Examples

nhlapi:::nhl\_url\_players(playerIds = c(8477474, 8477475))

nhl\_url\_players\_allseasons

Create an NHL API URL for all players' seasons statistics

#### Description

Create an NHL API URL for all players' seasons statistics

## Usage

nhl\_url\_players\_allseasons(playerIds)

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## Arguments

playerIds	integer(), vector of one or more ids of the players. The ids correspond to the
	ids expected by the NHL API people endpoint. For most cases the playerNames
	argument can be provided for more convenient usage.

# Examples

```
# Joe Sakic, all seasons
nhlapi:::nhl_url_players_allseasons(8451101L)
```

nhl\_url\_players\_seasons

Create an NHL API URL for players' seasons statistics

# Description

Create an NHL API URL for players' seasons statistics

## Usage

```
nhl_url_players_seasons(playerIds, seasons, playoffs = FALSE)
```

## Arguments

playerIds	integer(), vector of one or more ids of the players. The ids correspond to the ids expected by the NHL API people endpoint. For most cases the playerNames argument can be provided for more convenient usage.
seasons	numeric(), integer() or character(), vector of starting years of desired seasons in YYYY format, e.g. 1995 or "1995" for season 1995-1996. Accepts vectors such as c(1995:2000, 2010) to generate multiple seasons.
	Alternatively, also accepts character() with seasons in the format "YYYYZZZZ", where ZZZZ = YYYY + 1, e.g. "19951996". This is the format that ultimately gets sent to the NHL API.
	Some API endpoints, notably seasons exposed via nhl_seasons() also allow the value "current" to passed. This value will be returned unchanged.
playoffs	logical(1), if FALSE (default) get the regular seasons data, if TRUE, get the data for the playoffs.

## Details

If multiple players and seasons are provided, URLs will be created for all combinations of players and seasons.

# Examples

```
# Joe Sakic, regular season 1995/1996
nhlapi:::nhl_url_players_seasons(8451101L, 1995)
# Joe Sakic, playoffs 1995/1996, 1996/1997 and 1997/1998
nhlapi:::nhl_url_players_seasons(
    8451101L,
    1995:1997,
    playoffs = TRUE
   )
```

nhl\_url\_players\_stats Create an NHL API stats URL for players

# Description

Create an NHL API stats URL for players

#### Usage

```
nhl_url_players_stats(playerIds, params = NULL)
```

#### Arguments

playerIds	integer(), vector of one or more ids of the players. The ids correspond to the ids expected by the NHL API people endpoint. For most cases the playerNames argument can be provided for more convenient usage.
params	named list() of parameters that will be concatenated to the end of the URLs after ?. Parameters can have multiple values, in which case multiple URLs are created. Multiple parameters are separated by &.

## Value

character(), of API URLs, same length as playerIds.

## Examples

nhlapi:::nhl\_url\_players\_stats(8477474)

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nhl\_url\_schedule Create an NHL API URL for schedules

# Description

Create an NHL API URL for schedules

## Usage

```
nhl_url_schedule(
   seasons = NULL,
   teamIds = NULL,
   startDate = NULL,
   endDate = NULL,
   gameTypes = NULL,
   expand = NULL
)
```

# Arguments

seasons	numeric(), integer() or character(), vector of starting years of desired sea- sons in YYYY format, e.g. 1995 or "1995" for season 1995-1996. Accepts vectors such as c(1995:2000, 2010) to generate multiple seasons.
	Alternatively, also accepts character() with seasons in the format "YYYYZZZZ", where ZZZZ = YYYY + 1, e.g. "19951996". This is the format that ultimately gets sent to the NHL API.
	Some API endpoints, notably seasons exposed via nhl_seasons() also allow the value "current" to passed. This value will be returned unchanged.
teamIds	integer(), ids of the teams or NULL (default) for all teams. As of end of 2019, the valid team ids seem to be in the 1:54 range.
startDate	character(1), date in the format "YYYY-MM-DD" defining the start of the date interval for which the schedule is to be retrieved.
endDate	character(1), date in the format "YYYY-MM-DD" defining the end of the date interval for which the schedule is to be retrieved.
gameTypes	character(), defining the game types to retrieve. Valid game types are for example "R" for regular season or "P" for playoffs. See nhl_md_game_types() for all values and their descriptions.
expand	character(), of parameters passed as expand to the API URL. Some valid ex- amples seem to be "round.series" and "schedule.broadcasts", "schedule.linescore", "schedule.ticket". NULL for no expand parameter.

## Value

character(), vector of URLs.

# Examples

```
nhlapi:::nhl_url_schedule(seasons = 2015:2016)
nhlapi:::nhl_url_schedule(
    startDate = "2018-01-02",
    endDate = "2018-01-02"
)
nhlapi:::nhl_url_schedule(
    startDate = "2018-01-02",
    endDate = "2018-01-02",
    teamIds = c(29, 30),
    expand = "schedule.linescore"
)
```

nhl\_url\_seasons Create an NHL API URL for seasons

## Description

Create an NHL API URL for seasons

## Usage

nhl\_url\_seasons(seasons = NULL)

# Arguments

seasons	numeric(), integer() or character(), vector of starting years of desired sea- sons in YYYY format, e.g. 1995 or "1995" for season 1995-1996. Accepts vectors such as c(1995:2000, 2010) to generate multiple seasons.
	Alternatively, also accepts character() with seasons in the format "YYYYZZZZ", where ZZZZ = YYYY + 1, e.g. "19951996". This is the format that ultimately gets sent to the NHL API.
	Some API endpoints, notably seasons exposed via nhl_seasons() also allow the value "current" to passed. This value will be returned unchanged.

# Value

character(), of API URLs, same length as seasons or length 1 if seasons is NULL.

# Examples

```
nhlapi:::nhl_url_seasons()
nhlapi:::nhl_url_seasons(2015:2017)
nhlapi:::nhl_url_seasons("20152016")
```

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# Description

Create an NHL API URL for standings

# Usage

```
nhl_url_standings(seasons = NULL, standingsTypes = NULL, expand = NULL)
```

## Arguments

seasons	numeric(), integer() or character(), vector of starting years of desired sea- sons in YYYY format, e.g. 1995 or "1995" for season 1995-1996. Accepts vectors such as c(1995:2000, 2010) to generate multiple seasons.
	Alternatively, also accepts character() with seasons in the format "YYYYZZZZ", where ZZZZ = YYYY + 1, e.g. "19951996". This is the format that ultimately gets sent to the NHL API.
	Some API endpoints, notably seasons exposed via nhl_seasons() also allow the value "current" to passed. This value will be returned unchanged.
standingsTypes	character(), defining the standings types to retrieve. Valid standings types are for example "regularSeason" or "byDivision". See nhl_md_standings_types() for all values and their descriptions.
expand	character(), of parameters passed as expand to the API URL. A valid example seems to be "standings.record". NULL for no expand parameter.

## Value

character(), vector of URLs.

## Examples

```
nhlapi:::nhl_url_standings(seasons = 2015:2016)
nhlapi:::nhl_url_standings(
   standingsType = "byDivision",
   expand = "standings.record"
)
```

nhl\_url\_teams

# Description

Create an NHL API URL for teams

# Usage

nhl\_url\_teams(teamIds = NULL, params = NULL)

#### Arguments

teamIds	integer(), ids of the teams or NULL (default) for all teams. As of end of 2019,
	the valid team ids seem to be in the 1:54 range.
params	named list() of parameters that will be concatenated to the end of the URLs
	after ?. Parameters can have multiple values, in which case multiple URLs are
	created. Multiple parameters are separated by &.

## Value

character(), API URLs, same length as teamIds or length 1 if teamIds is NULL.

## Examples

```
nhlapi:::nhl_url_teams()
nhlapi:::nhl_url_teams(1:3)
```

nhl\_url\_tournaments Create an NHL API URL for tournaments

## Description

Create an NHL API URL for tournaments

## Usage

```
nhl_url_tournaments(tournamentTypes, seasons = NULL, expand = NULL)
```

#### Arguments

tournamentTypes

character(), vector of one or more tournament types. Currently supported types seem to be

- "playoffs"
- "olympics"
- "worldCup"

Those are exposed via shorthand functions

- nhl\_tournaments\_playoffs()
- nhl\_tournaments\_olympics()
- nhl\_tournaments\_worldcups()

seasons	numeric(), integer() or character(), vector of starting years of desired sea- sons in YYYY format, e.g. 1995 or "1995" for season 1995-1996. Accepts vectors such as c(1995:2000, 2010) to generate multiple seasons.
	Alternatively, also accepts character() with seasons in the format "YYYYZZZZ", where ZZZZ = YYYY + 1, e.g. "19951996". This is the format that ultimately gets sent to the NHL API.
	Some API endpoints, notably seasons exposed via nhl_seasons() also allow the value "current" to passed. This value will be returned unchanged.
expand	character(), of parameters passed as expand to the API URL. Two valid ex- amples seem to be "round.series" and "schedule.game.seriesSummary". NULL for no expand parameter.

## Value

character(), API URLs, same length as combinations of tournamentTypes, seasons and expand.

## See Also

nhl\_md\_tournament\_types()

# Examples

```
nhlapi:::nhl_url_tournaments("olympics")
nhlapi:::nhl_url_tournaments("playoffs", 2015:2016)
nhlapi:::nhl_url_tournaments("playoffs", 2015:2016, "round.series")
```

nhl\_url\_venues

Create an NHL API URL for venues

## Description

Create an NHL API URL for venues

#### Usage

nhl\_url\_venues(venueIds = NULL)

## Arguments

venueIds integer(), vector of one or more venue ids or NULL (default) for all currently exposed venues. The exported values seem incomplete, so it may be worth it to investigate other ids.

# Value

character(), API URLs, same length as venueIds or length 1 if venueIds is NULL.

## Examples

```
nhlapi:::nhl_url_venues()
nhlapi:::nhl_url_venues(5000:5006)
```

```
nhl_venues
```

Retrieve metadata on NHL venues from the API

#### Description

Retrieve metadata on NHL venues from the API

#### Usage

nhl\_venues(venueIds = NULL)

# Arguments

venueIds integer(), vector of one or more venue ids or NULL (default) for all currently exposed venues. The exported values seem incomplete, so it may be worth it to investigate other ids.

#### Value

data.frame, with information on venues, one row per venue.

#### Examples

```
## Not run:
    # Get information on currently exposed venues
    nhl_venues()
    # Get information on 3 historical venues
    nhl_venues(5000:5006)
```

## End(Not run)

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util\_attributes\_to\_cols

Add attributes as data frame columns

# Description

Take attributes with names specified by atrs from object lst and adds their value into columns with the same name in df.

## Usage

```
util_attributes_to_cols(lst, df, atrs = c("url", "copyright"))
```

## Arguments

lst	list, with attributes to be added as columns to df.
df	data.frame, onto which new columns containing attributes of lst should be added.
atrs	character(), vector of names of attributes of lst.

# Value

data.frame, df with added columns.

```
util_convert_minsonice
```

Convert "mm:ss" character to numeric minutes

# Description

Convert "mm:ss" character to numeric minutes

## Usage

```
util_convert_minsonice(chr, splitter = ":")
```

# Arguments

chr	character(), vector in format "mins: secs".
splitter	character(1), that splits minutes and seconds in elements of chr.

## Value

numeric(), vector of times in minutes. Same length as chr.

#### Examples

```
nhlapi:::util_convert_minsonice(c("20:00", "1500:30"))
```

util\_generate\_sysdata Generate the sysdata.rda file

## Description

Generate the sysdata.rda file

# Usage

```
util_generate_sysdata(playerIds = 8444849L:8490000L, tgtPath = "sysdata.rda")
```

#### Arguments

playerIds	integer(), vector of playerIds.
tgtPath	character(1), path where to save the generated object, NULL to not save.

## Value

data.frame, with player name hashes and ids.

```
util_inherit_attributes
```

Inherit attributes from another object

## Description

Take attributes with names specified by atrs from object src and add them as the same attributes to tgt.

## Usage

```
util_inherit_attributes(src, tgt, atrs = c("url", "copyright"))
```

# Arguments

src	object, with attributes to be inherited by tgt.
tgt	object, onto which attributes of src should be added.
atrs	character(), vector of names of attributes of src to be added to tgt.

## Value

object, same as tgt with attributes added.

util\_map\_player\_id Retrieve a player id from the name

## Description

Using a table of hashed names and ids, get a player id based on the name.

#### Usage

```
util_map_player_id(x, map = getOption("nhlapi_player_map"))
```

#### Arguments

Х	character(1) a player's name, not case sensitive for convenience.
map	data.frame, with 2 columns:
	<ul> <li>nameMd5: character() of hashed player names</li> </ul>
	• id: integer() of player ids used by the NHL API

## Value

integer(1), id of the player or NA\_integer if not found.

## Examples

```
nhlapi:::util_map_player_id(
    "Joe Sakic",
    data.frame(
        nameMd5 = "9d2a915c8610dbc524c1bc800e010fcc",
        id = 19L,
        stringsAsFactors = FALSE
    )
)
```

util\_map\_player\_ids Retrieve a player ids from their names

## Description

Retrieve a player ids from their names

## Usage

```
util_map_player_ids(playerNames, map = getOption("nhlapi_player_map"))
```

#### Arguments

playerNames	character(), vector of one or more player names. Not case sensitive for convenience.
map	data.frame, with 2 columns:
	<ul> <li>nameMd5: character() of hashed player names</li> </ul>
	<ul> <li>id: integer() of player ids used by the NHL API</li> </ul>

# Value

integer(), named vector of player ids, 'NA\_integer" for those names where id was not found. In case a player name has multiple ids, all of them are returned.

# Examples

```
nhlapi:::util_map_player_ids(
    c("Joe SAKIC", "peter Forsberg", "test")
)
```

util\_md5sum\_str Get MD5 hash for a character vector

# Description

Writes x to a temporary file using writeChar() and computes the md5sum() on that file, removing the file afterwards.

# Usage

util\_md5sum\_str(x)

#### Arguments

х

character(), vector to compute the MD5 for.

## Value

character(1), MD5 hash of a text file created from x using writeChar().

## Examples

nhlapi:::util\_md5sum\_str("test")

util\_prepare\_player\_ids

Prepare player ids based on player names

# Description

Prepare player ids based on player names

## Usage

```
util_prepare_player_ids(playerNames, map = getOption("nhlapi_player_map"))
```

## Arguments

playerNames	character(), vector of one or more player names. Not case sensitive for convenience.
map	data.frame, with 2 columns:
	<ul> <li>nameMd5: character() of hashed player names</li> </ul>
	<ul> <li>id: integer() of player ids used by the NHL API</li> </ul>

#### Value

integer(), named vector of found valid player ids, those not found omitted.

## Examples

```
nhlapi:::util_prepare_player_ids(c("joe sakic", "fake player"))
```

util\_process\_copyright

Move copyright information to attribute

## Description

Removes the element named el from x if present and keeps the information as an equally named attribute.

#### Usage

```
util_process_copyright(x, el = "copyright")
```

## Arguments

х	list(), to be processed.
el	character(1), name of the element to remove. Defaults to "copyright" as
	this is the intended use of the function.

#### Value

list, with the el element removed and added as attribute, if it is present in x. Unchanged x otherwise.

util\_process\_minsonice

Convert time columns from "mm:ss" to numeric minutes

#### Description

Convert time columns from "mm:ss" to numeric minutes

## Usage

```
util_process_minsonice(df, patt = "timeOn|TimeOn")
```

#### Arguments

df	data.frame, data to examine.
patt	character(1), pattern to match column names that contain time information in "mm:ss" format.

## Value

data.frame, with time columns converted from "mm:ss" characters to numeric minutes.

utit_ipinutist salely ipinu mulliple aala. jrames	util_rbindlist	Safely rbind multiple data.frames	
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#### Description

Attempts to replace do.call(rbind, lst) taking into consideration that some data frames in lst can have missing columns. Those are filled by NA values.

## Usage

util\_rbindlist(lst, fill = TRUE)

#### Arguments

lst	list(), of data frames to be rbind-ed into one.
fill	logical(1), if FALSE, this function just returns do.call(rbind, lst).

## Value

data.frame, the elements of 1st, rbind-ed into one.

# Examples

```
nhlapi:::util_rbindlist(list(
    datasets::mtcars[1, 2:3],
    datasets::mtcars[2, 4:5]
))
```

```
util_report_get_data_errors
```

```
Report errors encountered during nhl_get_data
```

## Description

Report errors encountered during nhl\_get\_data

# Usage

```
util_report_get_data_errors(x, reporter = log_e, ...)
```

## Arguments

х	list, results created by nhl_get_data().
reporter	function, used to report the constructed error message, e.g. message, warning, writeLines, etc.
	<pre>further arguments passed to reporter, e.g. con = file("~/log.txt") in case writeLines is the reporter.</pre>

## Value

character(), URLs for which the retrieval resulted in an error, invisibly. Optional side-effects.

## Examples

```
## Not run:
    # Write errors to a temporary text file
    tmpFile <- tempfile()
    util_report_get_data_errors(
        nhl_get_data(nhl_url_players(c("none", "8451101", "some"))),
        reporter = writeLines,
        con = tmpFile
    )
```

## End(Not run)

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