Package: euroleaguer (via r-universe)

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Type Package

Title 'Euroleague' and 'Eurocup' basketball API

Version 0.2.0

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Description Unofficial API wrapper for 'Euroleague' and 'Eurocup'
basketball API
(<https://www.euroleaguebasketball.net/en/euroleague/>), it
allows to retrieve real-time and historical standard and
advanced statistics about competitions, teams, players and
games.

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URL https://github.com/FlavioLeccese92/euroleaguer/

Imports cli, dplyr, glue, httr, jsonlite, lubridate, stringr, tibble,
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Suggests knitr, rmarkdown

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Repository https://flavioleccese92.r-universe.dev

RemoteUrl https://github.com/flavioleccese92/euroleaguer

RemoteRef HEAD

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Contents

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getCompetitionAheadBehind

Get competition ahead-behind standings

Description

Get competition ahead-behind standings

Usage

```
getCompetitionAheadBehind(season_code, round)
```

Arguments

season_code	One or more season codes as obtained from [getCompetitionHistory()](#). Examples are E2023 for Euroleague or U2023 for Eurocup 2023.
round	One or more round codes as obtained from [getCompetitionRounds()](#).

Value

Returns a summary tibble of ahead-behind for chosen competition and round

Reference webpage: [Ahead-behind standings](#)

Examples

```
## Not run:

getCompetitionAheadBehind(season_code = c("E2023", "E2022"), round = 1)


## End(Not run)
```

---

getCompetitionCalendar

Get competition calendar standings

Description

Get competition calendar standings

Usage

```
getCompetitionCalendar(season_code, round)
```

Arguments

season_code	One or more season codes as obtained from getCompetitionHistory(). Examples are E2023 for Euroleague or U2023 for Eurocup 2023.
round	One or more round codes as obtained from getCompetitionRounds().

Value

Returns a summary tibble of calendar standings for chosen competitions and rounds

Reference webpage: Calendar standings

Examples

```
if(interactive()) {

getCompetitionCalendar(season_code = c("E2023", "E2022"), round = 1)

}
```

---

getCompetitionHistory   *Competition metadata*

Description

[Experimental]

Retrieve values of arguments for specific data collection functions across all package.

Usage

```
getCompetitionHistory(competition_code)

getCompetitionRounds(season_code)

getCompetitionPhases(season_code)

getCompetitionTeams(season_code)

getCompetitionGames(season_code, round, phase_type = "All")
```

Arguments

competition_code

> One or more competition codes.
> Admitted values are E for Euroleague and U for Eurocup.

season_code   One or more season codes as obtained from getCompetitionHistory().
                   Examples are E2023 for Euroleague or U2023 for Eurocup 2023.

round   One or more round codes as obtained from getCompetitionRounds().

phase_type   One or more phase type codes as obtained from getCompetitionPhases().
                   Admitted values are RS for regular season, PO for playoffs and FF for final four.
                   Default is All for all.

Value

For each function, returns a tibble with information about history, rounds, phases, teams or games
of chosen season and competition code.

Examples

```
## Not run:

getCompetitionHistory(competition_code = c("E", "U")) |> head(5)

getCompetitionRounds(season_code = c("E2023", "E2022")) |> head(5)

getCompetitionPhases(season_code = c("E2023", "U2023")) |> head(5)
```

```
getCompetitionTeams(season_code = c("E2023", "U2023")) |> head(5)

getCompetitionGames(season_code = "E2023", round = 1:5) |> head(5)


## End(Not run)
```

---

getCompetitionMargins *Get competition margins standings*

Description

Get competition margins standings

Usage

```
getCompetitionMargins(season_code, round)
```

Arguments

season_code	One or more season codes as obtained from `getCompetitionHistory()`. Examples are `E2023` for Euroleague or `U2023` for Eurocup 2023.
round	One or more round codes as obtained from `getCompetitionRounds()`.

Value

Returns a summary tibble of standing margins for chosen competition and round

Reference webpage: Margins standings

Examples

```
## Not run:

getCompetitionMargins(season_code = c("E2023", "E2022"), round = 1)


## End(Not run)
```

---

getCompetitionStandings

Get competition traditional standings

Description

Get competition traditional standings

Usage

```
getCompetitionStandings(season_code, round)
```

Arguments

season_code	One or more season codes as obtained from getCompetitionHistory(). Examples are E2023 for Euroleague or U2023 for Eurocup 2023.
round	One or more round codes as obtained from getCompetitionRounds().

Value

Returns a summary tibble of standings for chosen competitions and rounds

Reference webpage: Traditional standings

Examples

```
## Not run:

getCompetitionStandings(season_code = c("E2023", "E2022"), round = 1)


## End(Not run)
```

---

getCompetitionStreaks *Get competition streaks standings*

Description

Get competition streaks standings

Usage

```
getCompetitionStreaks(season_code, round)
```

Arguments

season_code	One or more season codes as obtained from [getCompetitionHistory()](). Examples are E2023 for Euroleague or U2023 for Eurocup 2023.
round	One or more round codes as obtained from [getCompetitionRounds()]().

Value

Returns a summary tibble of streaks for chosen competitions and rounds

Reference webpage: Streaks standings

Examples

```
## Not run:

getCompetitionStreaks(season_code = c("E2023", "E2022"), round = 1)


## End(Not run)
```

---

getGameBoxScore   *Get game box-score*

Description

[Experimental]

Usage

```
getGameBoxScore(season_code, game_code)
```

Arguments

season_code	One or more season codes as obtained from [getCompetitionHistory()](). Examples are E2023 for Euroleague or U2023 for Eurocup 2023.
game_code	One or more game codes as obtained from [getCompetitionGames()]().

Value

Returns a list of elements for the chosen games and seasons

- **Team**. Name of the teams
- **Coach**. Name of the coaches
- **EndOfQuarter**. Team accumulated points by quarter
- **ByQuarter**. Team points for each quarter
- **PlayerStats**. Statistics for each player in the game

- **TeamStats**. Aggregated statistics for each team in the game

Glossary of columns:

Column name	Column extended name
GP	Game player
GS	Game started
MIN	Minutes played
PTS	Points scored
2PM	Two-pointers made
2PA	Two-pointers attempted
2P%	Two-point %
3PM	Three-pointers made
3PA	Three-pointers attempted
3P%	Three-point %
FTM	Free throws made
FTA	Free throws attempted
FT%	Free-throw %
OREB	Offensive rebounds
DREB	Defensive rebounds
TREB	Total rebounds
AST	Assists
STL	Steals
TO	Turnovers
BLK	Blocks
BLKA	Blocks against
FC	Personal fouls committed
FD	Personal fouls drawn
PIR	Performance Index Rating

Reference webpage: [BoxScore](#)

Examples

```
## Not run:

getGameBoxScore(season_code = c("E2023", "U2023"), game_code = 1)


## End(Not run)
```

---

getGameEvolution *Get game evolution*

Description

[Experimental]

Usage

```
getGameEvolution(season_code, game_code)
```

Arguments

season_code   One or more season codes as obtained from `getCompetitionHistory()`.
                Examples are `E2023` for Euroleague or `U2023` for Eurocup 2023.

game_code   One or more game codes as obtained from `getCompetitionGames()`.

Value

Returns a list of two elements for the chosen games and seasons

- **EvolutionSummary**. Overall information about minimum and maximum difference of scores between teams

- **Evolution**. Minute by minute points of each team

Reference webpage: GraphicStats

Examples

```
## Not run:

getGameEvolution(season_code = c("E2023", "U2023"), game_code = 1)


## End(Not run)
```

---

getGameHeader   *Game metadata*

Description

[Experimental]

Retrieve contextual information about games. Outputs may be required as arguments of other getGame* functions

Usage

```
getGameHeader(season_code, game_code)

getGamePlayers(season_code, game_code, team_code)

getGameRound(season_code, game_code)
```

Arguments

season_code	One or more season codes as obtained from getCompetitionHistory(). Examples are E2023 for Euroleague or U2023 for Eurocup 2023.
game_code	One or more game codes as obtained from getCompetitionGames().
team_code	One or more team codes as obtained from getCompetitionTeams(). Examples are ASV, MAD, ...

Value

For each function, returns a tibble with information about header, player or round of chosen season and game code.

Examples

```
## Not run:

getGameHeader(season_code = c("E2023", "U2023"), game_code = 1)

getGamePlayers(season_code = c("E2023", "U2023"), team_code = "ASV", game_code = 1)

getGameRound(season_code = c("E2023", "U2023"), game_code = 1)


## End(Not run)
```

---

getGamePlayByPlay   *Get game play-by-play*

Description

[Experimental]

Usage

```
getGamePlayByPlay(season_code, game_code)
```

Arguments

season_code	One or more season codes as obtained from getCompetitionHistory(). Examples are E2023 for Euroleague or U2023 for Eurocup 2023.
game_code	One or more game codes as obtained from getCompetitionGames().

Value

Returns a list of two elements for the chosen games and seasons

- **PlayByPlaySummary**. Overall information about the games, teams involved and status (live or not)

- **PlayByPlay**. Detailed information about the games, particularly **NumberOfPlay** and **Play-Type**

Glossary of `PlayType`:

PlayType	PlayInfo
2PA	Missed Two Pointer
2PM	Two Pointer
3PA	Missed Three Pointer
3PM	Three Pointer
AG	Shot Rejected
AS	Assist
BP	Begin Period
C	Coach Foul
CCH	Coach Challenge
CM	Foul
CMT	Technical Foul
CMTI	Throw-In Foul
CMU	Unsportsmanlike Foul
D	Def Rebound
EG	End Game
EP	End Period
FTA	Missed Free Throw
FTM	Free Throw In
FV	Block
IN	In
O	Off Rebound
OF	Offensive Foul
OUT	Out
RV	Foul Drawn
ST	Steal
TO	Turnover
TOUT	Time Out
TOUT_TV	TV Time Out

Reference webpage: PlayByPlay

Examples

```
## Not run:

PlayByPlay = getGamePlayByPlay(season_code = c("E2023", "U2023"), game_code = 1)
```

```
PlayByPlay$PlayByPlaySummary |> head(5)

PlayByPlay$PlayByPlay |> head(5)


## End(Not run)
```

---

getGamePoints   *Get game points*

Description

[Experimental]

Usage

```
getGamePoints(season_code, game_code)
```

Arguments

season_code	One or more season codes as obtained from [getCompetitionHistory()](). Examples are `E2023` for Euroleague or `U2023` for Eurocup 2023.
game_code	One or more game codes as obtained from [getCompetitionGames()]().

Value

Returns scoring information of each player for the chosen games and seasons (subset of play-by-play data). In particular:

- **NumberOfPlay**. Reference id of the action (useful for join with results of `getPlayByPlay`)
- **CoordX** and **CoordY**. Spatial coordinates of the shot
- **Zone**. Area of the court of the shot

Reference webpage: PlayByPlay

Examples

```
## Not run:

getGamePoints(season_code = c("E2023", "U2023"), game_code = 1)


## End(Not run)
```

---

getPlayerAdvanced *Get player advanced statistics*

Description

[Experimental]

Usage

```
getPlayerAdvanced(
  season_code,
  statistic_mode = c("perGame", "perMinute", "accumulated")
)
```

Arguments

season_code	One or more season codes as obtained from [getCompetitionHistory()](). Examples are E2023 for Euroleague or U2023 for Eurocup 2023.
statistic_mode	One or more aggregation modes of statistics. Admitted values are perGame, perMinute and accumulated.

Value

Returns a summary tibble of advanced players statistics for chosen seasons.

Glossary of columns:

Column name	Column extended name	Column description
eFG%	Effective field goal %	Combined two- and three-point shooting effectiveness
TS%	True shooting %	Percentage of points vs. points attempted
OREB%	Offensive rebound %	Estimated % of available offensive rebounds obtained while on court
DREB%	Defensive rebound %	Estimated % of available defensive rebounds obtained while on court
REB%	Rebound %	Estimated % of available rebounds obtained while on court
AST/TO	Assist to turnover ratio	Ratio of assists made to turnovers committed
AST-R	Assist ratio	Estimated % of assists per player's offensive possessions
TO-R	Turnover ratio	Estimated % of turnovers per player's offensive possessions
2PTA-R	Two-point attempts ratio	Estimated % of two-point attempts per player's offensive possessions
3PTA-R	Three-point attempts ratio	Estimated % of three-point attempts per player's offensive possessions
FT-RT	Free Throw rate	Measure of free throw attempts vs. field goal attempts

Reference webpage: Stats

Examples

```
## Not run:

getPlayerAdvanced(season_code = "E2023", statistic_mode = "perGame")


## End(Not run)
```

---

getPlayerMisc *Get player miscellaneous statistics*

Description

[Experimental]

Usage

```
getPlayerMisc(season_code)
```

Arguments

season_code   One or more season codes as obtained from `getCompetitionHistory()`.
               Examples are E2023 for Euroleague or U2023 for Eurocup 2023.

Value

Returns a summary tibble of miscellaneous players statistics for chosen seasons.

Glossary of columns:

Column name	Column extended name	Column description
DD2	Double-doubles	Games with double-digit totals in two of: points, rebounds, assists, steals and blc
TD3	Triple-doubles	Games with double-digit totals in three of: points, rebounds, assists, steals and bl

Reference webpage: Stats

Examples

```
## Not run:

getPlayerMisc(season_code = "E2023")


## End(Not run)
```

---

getPlayerPoints   *Get player points statistics*

Description

[Experimental]

Usage

```
getPlayerPoints(season_code)
```

Arguments

season_code   One or more season codes as obtained from `getCompetitionHistory()`.
                Examples are `E2023` for Euroleague or `U2023` for Eurocup 2023.

Value

Returns a summary tibble of points players statistics for chosen seasons.

Glossary of columns:

Column name	Column extended name	Column description
2PA-S	Two-point attempts share	Player's share of team's total two-point attempts
3PA-S	Three-point attempts share	Player's share of team's total three-point attempts
FTA-S	Free throw attempts share	Player's share of team's total free throw attempts
2PM-S	Two-pointers made share	Player's share of team's total two-pointers made
3PM-S	Three-pointers made share	Player's share of team's total three-pointers made
FTM-S	Free throws made share	Player's share of team's total free throws made
2P-RT	Two-Point Rate	% of a player's field goal attempts that are two-pointers
3P-RT	Three-Point Rate	% of field goal attempts that are three-pointers
%2P	% of points from two-pointers	% of points from two-point shots made
%3P	% of points from three-pointers	% of points from three-point shots made
%FT	% of points from free throws	% of points from free throws made

Reference webpage: Stats

Examples

```
## Not run:

getPlayerPoints(season_code = "E2023")


## End(Not run)
```

getPlayerStats *Get player statistics*

Description

[Experimental]

Usage

```
getPlayerStats(
  season_code,
  statistic_mode = c("perGame", "perMinute", "accumulated")
)
```

Arguments

season_code   One or more season codes as obtained from [`getCompetitionHistory()`](#).
                Examples are `E2023` for Euroleague or `U2023` for Eurocup 2023.

statistic_mode One or more aggregation modes of statistics.
                Admitted values are `perGame`, `perMinute` and `accumulated`.

Value

Returns a summary tibble of players statistics for chosen seasons.

Glossary of columns:

Column name	Column extended name
GP	Game player
GS	Game started
MIN	Minutes played
PTS	Points scored
2PM	Two-pointers made
2PA	Two-pointers attempted
2P%	Two-point %
3PM	Three-pointers made
3PA	Three-pointers attempted
3P%	Three-point %
FTM	Free throws made
FTA	Free throws attempted
FT%	Free-throw %
OREB	Offensive rebounds
DREB	Defensive rebounds
TREB	Total rebounds
AST	Assists
STL	Steals
TO	Turnovers

BLK	Blocks
BLKA	Blocks against
FC	Personal fouls committed
FD	Personal fouls drawn
PIR	Performance Index Rating

Reference webpage: Stats

Examples

```
## Not run:

getPlayerStats(season_code = "E2023", statistic_mode = "perGame")


## End(Not run)
```

---

getTeam   *Team metadata*

Description

[Experimental]

Retrieve contextual information about teams. Outputs may be required as arguments of other getTeam* or getPlayer* functions.

Usage

```
getTeam(season_code, team_code)

getTeamPeople(season_code, team_code)

getTeamGames(season_code, team_code)
```

Arguments

season_code	One or more season codes as obtained from `getCompetitionHistory()`. Examples are E2023 for Euroleague or U2023 for Eurocup 2023.
team_code	One or more team codes as obtained from `getCompetitionTeams()`. Examples are ASV, MAD, ...

Value

For each function, returns a tibble with information about team, people or games of chosen season and team code.

Examples

```
## Not run:

getTeam(team_code = "ASV", season_code = c("E2023", "E2022")) |> head(5)

getTeamPeople(team_code = "ASV", season_code = c("E2023", "E2022")) |> head(5)

getTeamGames(team_code = "ASV", season_code = c("E2023", "E2022")) |> head(5)


## End(Not run)
```

---

getTeamLeadStats   *Get team lead statistics*

Description

[Experimental]

Usage

```
getTeamLeadStats(season_code, phase_type = "All", subset = "All")
```

Arguments

season_code	One or more season codes as obtained from `getCompetitionHistory()`. Examples are `E2023` for Euroleague or `U2023` for Eurocup 2023.
phase_type	One or more phase type codes as obtained from `getCompetitionPhases()`. Admitted values are `RS` for regular season, `PO` for playoffs and `FF` for final four. Default is `All` for all.
subset	One or more game subsets. Admitted values are `HomeGames`, `AwayGames`, `GamesWon`, `GamesLost`, `ResultsIn5Points` (for games resulted in +/-5 points) and `All`. Default is `All`.

Value

Returns a list of elements for the chosen seasons, phase_type and subset.

- **TeamAccumulated**. Total sum of statistics of all teams team
- **TeamAveragePerGame**. Average per game of statistics of all teams

Glossary of columns:

Column name	Column extended name
GP	Game player
GS	Game started
MIN	Minutes played

PTS	Points scored
2PM	Two-pointers made
2PA	Two-pointers attempted
2P%	Two-point %
3PM	Three-pointers made
3PA	Three-pointers attempted
3P%	Three-point %
FTM	Free throws made
FTA	Free throws attempted
FT%	Free-throw %
OREB	Offensive rebounds
DREB	Defensive rebounds
TREB	Total rebounds
AST	Assists
STL	Steals
TO	Turnovers
BLK	Blocks
BLKA	Blocks against
FC	Personal fouls committed
FD	Personal fouls drawn
PIR	Performance Index Rating

Reference webpage: [TeamLead](#)

Examples

```
## Not run:

  TeamLeadStats = getTeamLeadStats(season_code = c("E2022", "E2023"), phase_type = "RS")

  TeamLeadStats$TeamAccumulated |> head(5)

  TeamLeadStats$TeamAveragePerGame |> head(5)


## End(Not run)
```

---

getTeamStats	*Get team statistics*

Description

[Experimental]

Usage

```
getTeamStats(season_code, team_code, phase_type = "All")
```

Arguments

season_code	One or more season codes as obtained from getCompetitionHistory(). Examples are E2023 for Euroleague or U2023 for Eurocup 2023.
team_code	One or more team codes as obtained from getCompetitionTeams(). Examples are ASV, MAD, ...
phase_type	One or more phase type codes as obtained from getCompetitionPhases(). Admitted values are RS for regular season, PO for playoffs and FF for final four. Default is All for all.

Value

Returns a list of elements for the chosen teams and seasons:

- **PlayerAccumulated**. Total sum of statistics by player
- **PlayerAveragePerGame**. Average per game of statistics by player
- **PlayerAveragePer40**. Average per 40 minutes of statistics by player
- **TeamAccumulated**. Total sum of statistics of team
- **TeamAveragePerGame**. Average per game of statistics of teams

Glossary of columns:

Column name	Column extended name
GP	Game player
GS	Game started
MIN	Minutes played
PTS	Points scored
2PM	Two-pointers made
2PA	Two-pointers attempted
2P%	Two-point %
3PM	Three-pointers made
3PA	Three-pointers attempted
3FG%	Three-point %
FTM	Free throws made
FTA	Free throws attempted
FT%	Free-throw %
OREB	Offensive rebounds
DREB	Defensive rebounds
TREB	Total rebounds
AST	Assists
STL	Steals
TO	Turnovers
BLK	Blocks
BLKA	Blocks against
FC	Personal fouls committed
FD	Personal fouls drawn
PIR	Performance Index Rating

Reference webpage: Team

Examples

```
## Not run:

 TeamStats = getTeamStats(team_code = "ASV", season_code = c("E2023", "E2022"), phase_type = "RS")

 TeamStats$PlayerAccumulated |> head(5)

 TeamStats$PlayerAveragePerGame |> head(5)

 TeamStats$PlayerAveragePer40 |> head(5)

 TeamStats$TeamAccumulated |> head(5)

 TeamStats$TeamAveragePerGame |> head(5)


## End(Not run)
```

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