

NHL dataset

Obtaining data from the NHL API

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Abstract

This document describes the process of obtaining data from NHL Records and Stats APIs.

1 NHL API

NHL provides two main APIs: Stats API and Records API. Description of some of their endpoints is provided in the following sections (taken from *Philip Bulsink* <https://gitlab.com/dword4/nhlapi>).

2 NHL Stats API endpoints

Only some endpoints are presented here, full description can be found here: <https://gitlab.com/dword4/nhlapi/blob/master/stats-api.md>.

- **Teams**

GET <https://statsapi.web.nhl.com/api/v1/teams>

Returns a list of data about all teams including their id, venue details, division, conference and franchise information.

GET <https://statsapi.web.nhl.com/api/v1/teams/ID/roster>

Returns entire roster for a team including id value, name, jersey number and position details.

- **People**

GET <https://statsapi.web.nhl.com/api/v1/people/ID>

Gets details for a player, must specify the id value in order to return data.

GET <https://statsapi.web.nhl.com/api/v1/people/ID/stats>

Complex endpoint with lots of append options to change what kind of stats you wish to obtain

Modifiers

[?stats=statsSingleSeason&season=19801981](#)

Obtains single season statistics for a player

[?stats=homeAndAway&season=20162017](#)

Provides a split between home and away games.

[?stats=winLoss&season=20162017](#)

Very similar to the previous modifier except it provides the W/L/OT split instead of Home and Away

[?stats=byMonth&season=20162017](#)

Monthly split of stats

[?stats=byDayOfWeek&season=20162017](#)

Split done by day of the week

[?stats=vsDivision&season=20162017](#)

Division stats split

[?stats=vsConference&season=20162017](#)

Conference stats split

[?stats=vsTeam&season=20162017](#)

Conference stats split

[?stats=gameLog&season=20162017](#)

Provides a game log showing stats for each game of a season

[?stats=regularSeasonStatRankings&season=20162017](#)

Returns where someone stands vs the rest of the league for a specific **regularSeasonStatRankings**

[?stats=goalsByGameSituation&season=20162017](#)

Shows number on when goals for a player happened like how many in the shootout, how many in each period, etc.

[?stats=onPaceRegularSeason&season=20172018](#)

This only works with the current in-progress season and shows projected totals based on current **onPaceRegularSeason**

- **Draft**

GET <https://statsapi.web.nhl.com/api/v1/draft>

Get round-by-round data for current year's NHL Entry Draft.

GET <https://statsapi.web.nhl.com/api/v1/draft/YEAR>

Takes a YYYY format year and returns draft data

- **Prospects**

GET <https://statsapi.web.nhl.com/api/v1/draft/prospects>

Get all NHL Entry Draft prospects.

GET <https://statsapi.web.nhl.com/api/v1/draft/prospects/ID>

Get an NHL Entry Draft prospect.

3 NHL Records API endpoints

Only some endpoints are presented here, full description can be found here:

<https://gitlab.com/dword4/nhlapi/blob/master/records-api.md>.

All queries are prefixed with <https://records.nhl.com/site/api> and are GET requests unless otherwise noted.

- **Filtering**

This is slightly different than the normal NHL API, see the following example:

<https://records.nhl.com/site/api/draft?cayenneExp=draftYear=2017%20and%20draftedByTeamId=15>

The %20 value translates to a space, this needs to be taken into account as removing the spaces will break the query, so anything after `cayenneExp` can have spaces when separating two or more conditions.

Often you can filter by information returned in an unfiltered query so using the draft example you can append `roundNumber=4` onto the `cayenneExp` to only look at 4th round selections.

- **Draft GET** <https://records.nhl.com/site/api/draft>

Returns A LOT of draft data, looks to be every pick ever.

Filtering

[?cayenneExp=draftYear=2017](https://records.nhl.com/site/api/draft?cayenneExp=draftYear=2017)

This filters by a single year.

[draftedByTeamId=ID](https://records.nhl.com/site/api/draft?cayenneExp=draftYear=2017&draftedByTeamId=ID)

Drill down to a specific teams drafting.