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**nhl**

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## API REFERENCE

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The [nhl](#) library is a Python 3 package for NHL game and player stats.



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**CHAPTER  
ONE**

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**NHL**

A Python 3 API for NHL game and player stats.

```
class nhl.Conference(id: int, name: str, name_short: str, abbreviation: str)
    NHL conference object.

    abbreviation: str
        Conference abbreviation

    id: int
        The NHL statsapi universal conference ID

    name: str
        Conference name

    name_short: str
        Conference name shortened

class nhl.Division(id: int, name: str, name_short: str, abbreviation: str)
    NHL division object.

    abbreviation: str
        Division abbreviated name

    id: int
        The NHL statsapi universal division ID

    name: str
        Division name

    name_short: str
        Division short name

class nhl.Event(game_id: int, id: int, type: str, subtype: str, time: GameTime, location: Location, value: float,
               score: tuple[int, int], by_player_id: int, on_player_id: int, by_team_id: int, on_team_id: int)
    NHL event object.

class nhl.Franchise(id: int, name: str)
    NHL franchise object.

    id: int
        The NHL statsapi universal franchise ID

    name: str
        Franchise name
```

```
class nhl.GameTime(period: int, period_sec: int)
```

NHL game time object.

This object represents a unique time of the game. There are convenience properties to convert the game time into convenient formats.

**property min\_sec** : tuple[int, int]

Elapsed minutes and seconds of the game.

**period** : int

Game period. 1-3 for regulation. 4+ for overtime.

**property period\_min\_sec** : tuple[int, int]

Elapsed minutes and seconds of the period.

**period\_sec** : int

Elapsed seconds of the period.

**property period\_str** : str

Period number as string (i.e. “2nd”)

**property sec** : int

Elapsed seconds of the game.

```
class nhl.Location(x: int | None = None, y: int | None = None)
```

NHL location object.

**distance**(other)

Measure distance between current location and another on-ice location.

#### Parameters

**other** : *Location*

location to measure distance from

#### Returns

distance (ft)

#### Return type

float

**x** : int | None = None

Rink position in ft along x-axis (length) [-100, 100]

**y** : int | None = None

Rink position in ft along y-axis (breadth) [-42, 42]

```
class nhl.Official(id: int, name: str)
```

NHL official object.

**property first\_name** : str

Official's first name

**id** : int

The NHL statsapi universal official ID

**property last\_name** : str

Official's last name

**name** : str  
Official's full name

**class nhl.Player**(*id*: int, *name*: str, *number*: int, *position*: str, *height*: int, *weight*: int, *shoots\_catches*: str, *birth\_date*: date, *birth\_city*: str, *birth\_country*: str)

NHL player object.

**property age** : int  
Current age in years

**birth\_city** : str  
Player's birth city

**birth\_country** : str  
Player's birth country

**birth\_date** : date  
Player's birth date

**property first\_name** : str  
Player's first name

**height** : int  
Player's height in total inches

**property height\_ft\_in** : tuple[int, int]  
Height in feet and inches (*height* // 12, *height* % 12)

**id** : int  
The NHL statsapi universal player ID

**property last\_name** : str  
Player's last name

**name** : str  
Player's full name

**number** : int  
Player's primary number

**position** : str  
Player's primary position ("LW", "C", "RW", "D", "G")

**shoots\_catches** : str  
Indication of whether the player shoots (skater)/catches (goalie) "L" or "R"

**weight** : int  
Player's weight in lbs

**class nhl.Shift**(*game\_id*: int, *player\_id*: int, *shift\_id*: int, *on*: GameTime, *off*: GameTime)

NHL shift object.

**game\_id** : int  
NHL statsapi unique game ID

**length** : int  
Shift length in seconds

**off** : *GameTime*  
Shift end game time

**on** : *GameTime*  
Shift start game time

**player\_id** : *int*  
NHL statsapi unique player ID

**shift\_id** : *int*  
Shift number for specified game

**class nhl.Team**(*id*: *int*, *location*: *str*, *name*: *str*, *abbreviation*: *str*, *first\_year*: *int*, *division*: *Division*, *conference*: *Conference*, *franchise*: *Franchise*)  
NHL team object.

**abbreviation** : *str*  
Team's name abbreviated

**conference** : *Conference*  
The NHL conference the team is in

**division** : *Division*  
The NHL division the team is in

**first\_year** : *int*  
First year of play

**franchise** : *Franchise*  
The NHL franchise the team belongs to

**property full\_name** : *str*  
Team's full name

**id** : *int*  
The NHL statsapi universal team ID

**location** : *str*  
Team's location

**name** : *str*  
Team's name

**class nhl.Venue**(*id*: *int*, *name*: *str*)  
NHL venue object.

**id** : *int*  
The NHL statsapi universal venue ID

**name** : *str*  
Venue name

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CHAPTER  
TWO

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## NHLSTATSAPI

A module containing functions for querying the NHL statsapi REST API <https://statsapi.web.nhl.com/api/v1>.

`nhl.statsapi.conference(id: int) → Conference`

Fetches a single conference by its ID.

**Parameters**

`id: int`

The NHL statsapi conference ID.

**Returns**

A `Conference` object.

`nhl.statsapi.conferences() → list[Conference]`

Fetches all conferences.

**Returns**

A list of `Conference` objects.

`nhl.statsapi.division(id: int) → Division`

Fetches a single division by its ID.

**Parameters**

`id: int`

The NHL statsapi division ID.

**Returns**

A `Division` object.

`nhl.statsapi.divisions() → list[Division]`

Fetches all divisions.

**Returns**

A list of `Division` objects.

`nhl.statsapi.franchise(id: int) → Franchise`

Fetches a single franchise by its ID.

**Parameters**

`id: int`

The NHL statsapi franchise ID.

**Returns**

A `Franchise` object.

`nhl.statsapi.franchises()` → `list[Franchise]`

Fetches all franchises.

**Returns**

A list of `Franchise` objects.

`nhl.statsapi.player(id: int)` → `Player`

Fetches a single player by its ID.

**Parameters**

`id: int`

The NHL statsapi player ID.

**Returns**

A `Player` object.

`nhl.statsapi.players(ids: Sequence[int])` → `list[Player]`

Fetches multiple players by their IDs.

**Returns**

A list of `Player` objects.

`nhl.statsapi.shifts(game_id: int, player_id: int)` → `list[Shift]`

Fetches all shifts of a player of a given game.

**Parameters**

`game_id: int`

The NHL statsapi game ID.

`player_id: int`

The NHL statsapi player ID.

**Returns**

A list of `Shift` objects.

**Raises**

`ValueError` – If the player is not found in the game.

`nhl.statsapi.team(id: int)` → `Team`

Fetches a single team by its ID.

**Parameters**

`id: int`

The NHL statsapi team ID.

**Returns**

A `Team` object.

`nhl.statsapi.teams()` → `list[Team]`

Fetches all teams.

**Returns**

A list of `Team` objects.

`nhl.statsapi.venue(id: int)` → `Venue`

Fetches a single venue by its ID.

**Parameters**

**id: int**

The NHL statsapi venue ID.

**Returns**

A [Venue](#) object.

`nhl.statsapi.venues()` → `list[Venue]`

Fetches all venues.

**Returns**

A list of [Venue](#) objects.



## VERSIONING

The `nh1` library uses semantic versioning. Releases are versioned `major.minor.patch`.

Major versions introduce API-changing features. Minor versions add features that are backwards-compatible with other releases. Patch versions make backwards-compatible bug fixes.

### 3.1 Alpha releases

Versions before `0.1.0` are alpha releases. Alpha releases are versioned `0.0.alpha`. There is no API compatibility guarantee for them. They can be thought of as `0.0.alpha-major`.

### 3.2 Beta releases

Versions before `1.0.0` are beta releases. Beta releases are versioned `0.beta.x` and are API-compatible. They can be thought of as `0.beta-major.beta-minor`.



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