

Boat Example JSON

Name	Type	Description
url	string	Required. URL with auto-generated unique id
id	string	Required. Auto-generated unique id
name	string	Required. Name of boat
type	string	Required. Type of boat
length	int	Required. Length of boat in feet
at_sea	boolean	Required. Default is false

```
{
  "url": "https://.../boats/kj0987a234bcdasdf12",
  "id": "kj0987a234bcdasdf12",
  "name": "Sea Witch",
  "type": "Catamaran",
  "length": 28,
  "at_sea": false
}
```

Slip Example JSON

Name	Type	Description
url	string	Required. URL with auto-generated unique id
id	string	Required. Auto-generated unique id
number	int	Required. Slip number; may not be unique

current_boat	string	ID of the current boat, null if empty
current_boat_url	string	Unique URL of the current boat, null if empty
arrival_date	string	Date current boat arrived in "MM/DD/YYYY", null if empty
departure_history	[histJSON]	list of previous boats and departure dates

A `histJSON` is a json object that contains the `departure_date` and the ID of the `departed_boat` .

```
{
  "url": "https://.../slips/123abc",
  "id": "123abc",
  "number": 5,
  "current_boat": "abc555",
  "current_boat_url": "https://.../boats/abc555",
  "arrival_date": "1/1/2015",
  "departure_history":
    [ { "departure_date": "11/4/2014", "departed_boat": "123aaa" } ]
}
```

View a list of boats

Returns an array of boat information in JSON, including urls to each boat.

`GET /boats`

Response

```
Status: 200 OK

[
  {
    "url": "https://.../boats/cdasdf12kj0987a23",
    "id": "cdasdf12kj0987a23",
    "name": "S.S. Awesome",
    "type": "power boat",
```

```
    "length": 18,  
    "at_sea": false  
  }  
]
```

View a single boat

Returns information of a boat with `{boat_id}` in JSON, including the url to the boat.

```
GET /boats/{boat_id}
```

Response

```
Status: 200 OK  
  
{  
  "url": "https://.../boats/kj0987a234bcdasdf15",  
  "id": "kj0987a234bcdasdf15",  
  "name": "S.S. Awesome",  
  "type": "power boat",  
  "length": 18,  
  "at_sea": false  
}
```

View a list of slips

Returns an array of slip information in JSON, including urls to each slip.

```
GET /slips
```

Response

```
Status: 200 OK  
  
[
```

```
{
  "url": "https://.../slips/cdasdf12kj0987a23",
  "id": "cdasdf12kj0987a23",
  "number": 5,
  "current_boat": "kj0987a234bcdasdf1234hl",
  "current_boat_url": "https://.../boats/kj0987a234bcdasdf1234hl",
  "arrival_date": "1/1/2015",
  "departure_history":
    [ {
      "departure_date": "11/4/2014",
      "departed_boat": "123aaa"
    }, ...
  ]
}
```

View a single slip

Returns information of a slip with `{slip_id}` in JSON, including the url to the slip.

```
GET /slips/{slip_id}
```

Response

Status: 200 OK

```
{
  "url": "https://.../slips/123abc",
  "id": "123abc",
  "number": 5,
  "current_boat": "abc555",
  "current_boat_url": "https://.../boats/abc555",
  "arrival_date": "1/1/2015",
  "departure_history":
    [ {
      "departure_date": "11/4/2014",
      "departed_boat": "123aaa"
    }, ...
  ]
}
```

Create a new boat

POST /boats

Input

Name	Type	Description
name	string	Required. Name of boat
type	string	Required. Type of boat
length	int	Required. Length of boat in feet

Invalid data, extra data, or incorrect data types will be rejected.

Note: A new boat defaults to `true` for `at sea`, and the boat `id` is auto-generated on the server.

Request Body

```
{
  "name": "Escape",
  "type": "yacht",
  "length": 390
}
```

Response

Status: 201 Created

```
{
  "url": "https://.../boats/dasdf1234hl",
  "id": "dasdf1234hl",
  "name": "Escape",
  "type": "yacht",
  "length": 390,
  "at sea": true
}
```

Create a new slip

POST /slips

Input

Name	Type	Description
number	int	Required. Slip number; may not be unique

Invalid data, extra data, or incorrect data types will be rejected.

Note 1: A new slip defaults to being empty. That is, `current_boat` and `arrival_date` default to `null`, and the `departure_history` is an empty array.

Note 2: The slip `id` is auto-generated on the server.

Request Body

```
{
  "number": 125
}
```

Response

Status: 201 Created

```
{
  "url": "https://.../slips/456abc",
  "id": "456abc",
  "number": 125,
  "current_boat": "kj0987a234bcdasdf15",
  "current_boat_url": "https://.../boats/kj0987a234bcdasdf15",
  "arrival_date": "1/1/2015",
  "departure_history":
```

```
[ {
  "departure_date": "11/4/2014",
  "departed_boat": "87a234bcdailkjsdf15"
}, ...
]
```

Edit a boat

PATCH `/boats/{boat_id}`

Input

Name	Type	Description
name	string	Required. Name of boat
type	string	Required. Type of boat
length	int	Required. Length of boat in feet

Invalid data, extra data, or incorrect data types will be rejected.

Note: The property `at sea` can only be changed by docking or departing a boat.

Request Body

```
{
  "name": "Escape",
  "type": "yacht",
  "length": 390
}
```

Response

Status: 200 OK

```
{
  "url": "https://.../boats/dasdf1234hl",
  "id": "dasdf1234hl",
  "name": "Escape",
  "type": "yacht",
  "length": 390,
  "at sea": true
}
```

Edit a slip

```
PATCH /slips/{slip_id}
```

Input

Name	Type	Description
number	int	Required. Slip number; may not be unique

Invalid data, extra data, or incorrect data types will be rejected.

Note: All other slip properties can only be changed by docking or departing a boat.

Request Body

```
{
  "number": 1250
}
```

Response

Status: 200 OK

```
{
  "url": "https://.../slips/456abc",
  "id": "456abc",
}
```



```
"number": 1250,
"current_boat": null,
"current_boat_url": null,
"arrival_date": null,
"departure_history":
  [ {
    "departure_date": "11/4/2014",
    "departed_boat": "87a234bcdailkjsdf15"
  }, ...
  ]
}
```

Delete a boat

```
DELETE /boats/{boat_id}
```

Response

Status: 204 No Content

Boat is removed from data store. If the boat was current not at sea, then the slip is emptied through the data store.

Delete a slip

```
DELETE /slips/{slip_id}
```

Response

Status: 204 No Content

Slip is removed from data store. If the slip is currently occupied, the boat is put to sea.

Set a Boat to a slip

```
PUT /boats/{boat_id}/slips/{slip_id}
```

Request will be rejected if the boat is already docked or the slip is already occupied.

Request Body

```
{  
  "arrival_date", "1/15/2016"  
}
```

Response

Status: 204 No Content

Set a Boat to Sea

```
DELETE /boats/{boat_id}/slips/{slip_id}?departure={datestring}
```

- The `boat_id` and date of `departure` from the slip is appended to the slip's `departure_history` array.
- The slip's properties of `current_boat`, `current_boat_url`, and `arrival_date` are set to `null`.
- The parameter `departure` must be a date string in the form of `mm/dd/yyyy`, such as `2/5/2016`
- Request will be rejected if the boat is already docked or the slip is already occupied.

Response

Status: 204 No Content

