

API v1 Draft

This is a draft specification for version 1 of the ubcnw-server REST API.

Many things are likely to change before finalization.

Using the API

Encoding

All body requests and responses are encoded in JSON. The fields in the specification for each model object directly correspond to its JSON fields in requests and responses, unless otherwise indicated.

Versioning

All API calls must be preceded by a version identifier:

`http://host:port/api/v1/`

Alternatively, you may also request the latest API:

`http://host:port/api/latest/`

All endpoints documented are expressed relative to the above URL.

Parameters

URL parameters are expressed with `:this` notation.

Optional parameters are in parentheses.

Authentication

TBD

Data Model

Blips

A ‘blip’ is a general class of event that is propagated to a group’s users.

Specification

| Field | Type | Description | Required |
|---------|--------|-------------------------------------|----------|
| id | Long | A unique index generated by the DB. | true |
| group | Group | The group of this blip. | true |
| name | String | A user-readable event name. | true |
| summary | String | A user-readable event summary. | false |
| link | String | A link to the event's page. | false |
| time | Date | The time of the event. | false |
| address | String | User-readable address of location. | false |
| lat | Double | Latitude of event location. | false |
| lng | Double | Longitude of event location. | false |

Example Data TODO

Users

TODO: (probably best to wait on auth for this one)

Groups

A ‘group’ is a classification composed of users who wish to receive a certain type of notification.

TODO: groups admin API

Specification

| Field | Type | Description | Required |
|-----------|---------|---|----------|
| gid | Long | Group identifier | true |
| name | String | A user-readable group name | true |
| interests | Long | The identifier of the appropriate group-interest object | true |
| concrete | Boolean | True if this is a concrete group | true |

Example Data TODO

Examples

A concrete group would be the UBC math club.

An abstract group would be a “bus notifications” group.

Interest

An interest is a classification indicated by individual users. Interests are paired with groups to identify potential Blips of interest.

Specification

| Field | Type | Description | Required |
|--------|--------|---|----------|
| iid | Long | Interest identifier | true |
| name | String | User-readable name of this interest | true |
| groups | Long | The identifier of the appropriate group-interest object | true |

Example Data

TODO

Endpoints

Blips

| Path | Method | Notes |
|-----------|--------|--|
| /blip/ | GET | Receives a list of the user’s current blips. |
| /blip/ | POST | Creates a new blip with the JSON data in the request’s body. |
| /blip/:id | GET | Retrieves the blip with the given id. |
| /blip/:id | PUT | Updates the blip’s fields with the JSON data in the request’s body. TODO: authentication |
| /blip/:id | DELETE | Deletes the blip with the given id. |

TODO: group-specific blip pulling.

Examples

TODO

Blip Stream

Endpoint:

`/blip/stream`

ubcnw-server can communicate real-time events to clients connected using unidirectional WebSockets.

JSON blobs representing ‘updates’ are sent over the WebSocket stream.

Update Specification

This specification corresponds to JSON fields in the messages sent via WebSocket.

| Field | Type | Description |
|-------|------------------------------|--|
| type | enum { add, update, delete } | Denotes the type of update. |
| id | Long | The blip being added, updated, or deleted. |