

# diretto Task API

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Version v2 - Draft

## Description

The Task API represents an external service that enables the handling of certain tasks. In terms of the diretto platform, a task is a request of specific footage. Reporters may take in part in tasks and contribute required documents as submissions. A task is always bound to a location and a time frame. A title and description define the task and optional tags allow to categorize it. Votes help to prioritize different tasks within the community. Tasks can be commented for exchange of ideas. Finally, every user can submit an existing document as footage for the task. The community can then rate the suitability of the submission regarding the task request. Besides the of directed collection of live footage, the Task API can also be used for specialized search queries. In this case, a task represents a search query and all potential results are submissions. This user-driven search is helpful for queries when only users can reason about appropriate hits by analyzing the documents.

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## Introduction

Supported authentication schemes:

- Basic Authentication

Base URI: `http://taskservice/v2`

## 1 Comment

This resource represents a comment. Comments can be added by users to a task in order to discuss the task.

`http://taskservice/v2/task/{task-id}/comment/{comment-id}`

<b>task-id</b>	task ID
<b>comment-id</b>	comment ID

### 1.1 Create a new comment

Adds a new comment to the task.

#### URI

`http://taskservice/v2/task/{task-id}/comments`

#### Parameters

<b>task-id</b>	task ID
----------------	---------

#### HTTP Method

POST

#### Formats

- `application/json`

#### Authentication

required

#### Request Entities

```

1 {
2   "content": "blablabla"
3 }
```

## Responses

201 Created Comment has been created. The location header contains its URI and thus also the comment id.

400 Bad Request Invalid comment data.

404 Not Found Task not found.

## Response Entities

n/a

## 1.2 Get all comments of task

Returns all comments of task.

## URI

`http://taskservice/v2/task/{task-id}/comments`

## Parameters

<b>task-id</b>	task ID
----------------	---------

## HTTP Method

GET

## Formats

- application/json

## Authentication

required

## Request Entities

n/a

## Responses

200 OK Comment list in response entity.

404 Not Found Task not found

## Response Entities

```
1 {
2   "comments":{
3     "link":{
4       "rel":"self",
5       "href":"http://taskservice/v2/task/eafbad70-7972-11e0-a1f0-0800200c9a66/comments"
6     },
7     "list":[
8       {
9         "comment":{
10           "id":"8e252710-77cf-11e0-a1f0-0800200c9a66",
11           "link":{
12             "rel":"self",
13             "href":"http://taskservice/v2/task/eafbad70-7972-11e0-a1f0-0800200c9a66/comment/8e252710-77cf-11e0-a1f0-0800200c9a66"
14           },
15           "content":"blablabla",
16           "creationTime":"2010-07-17T18:54:11.939Z",
17           "creator":{
18             "id":"123456",
19             "link":{
20               "rel":"self",
21               "href":"http://core/v2/user/123456"
22             }
23           },
24           "votes":{
25             "link":{
26               "rel":"self",
27               "href":"http://taskservice/v2/task/2671f383-a28c-44d5-b86b-f7f04bb0a015/tag/ef7987f2bd22f4a8cf236c83a57c1f6b/votes"
28             },
29             "up":12,
30             "down":2
31           }
32         }
33       }
34     ]
35   }
36 }
```

### 1.3 Retrieve a single comment

Returns a single comment.

#### URI

`http://taskservice/v2/task/{task-id}/comment/{comment-id}`

## Parameters

## HTTP Method

GET

## Formats

- application/json

## Authentication

required

## Request Entities

n/a

## Responses

200 OK

404 Not Found

## Response Entities

```
1 {
2   "comment":{
3     "id":"8e252710-77cf-11e0-a1f0-0800200c9a66",
4     "link":{
5       "rel":"self",
6       "href":"http://taskservice/v2/task/eafbad70-7972-11e0-a1f0-0800200c9a66/comment/8e252710-77cf-11e0-a1f0-0800200c9a66"
7     },
8     "content":"blablabla",
9     "creationTime":"2010-07-17T18:54:11.939Z",
10    "creator":{
11      "id":"123456",
12      "link":{
13        "rel":"self",
14        "href":"http://core/v2/user/123456"
15      }
16    },
17    "votes":{
18      "link":{
19        "rel":"self",
20        "href":"http://taskservice/v2/task/2671f383-a28c-44d5-b86b-f7f04bb0a015/tag/ef7987f2bd22f4a8cf236c83a57c1f6b/votes"
21      },
22      "up":12,
```

```
23         "down":2
24     }
25 }
26 }
```

## 2 Index

This entry resource provides information about the service instance.

`http://taskservice/v2`

### 2.1 Get service instance data

Returns a static information about the deployed Task service instance.

#### URI

`http://taskservice/v2`

#### Parameters

#### HTTP Method

GET

#### Formats

- application/json

#### Authentication

not required

#### Request Entities

n/a

#### Responses

200 OK Service instance data in response entity

#### Response Entities

```
1 {
2   "api":{
3     "name":"org.diretto.api.external.task",
4     "version":"v2"
5   },
6   "service":{
7     "name":"diretto Task Node",
8     "version":"0.1.0"
9   },
10  "deployment":{
11    "title":"fubar Task Service",
12    "contact":"n/a",
13    "website":{
```

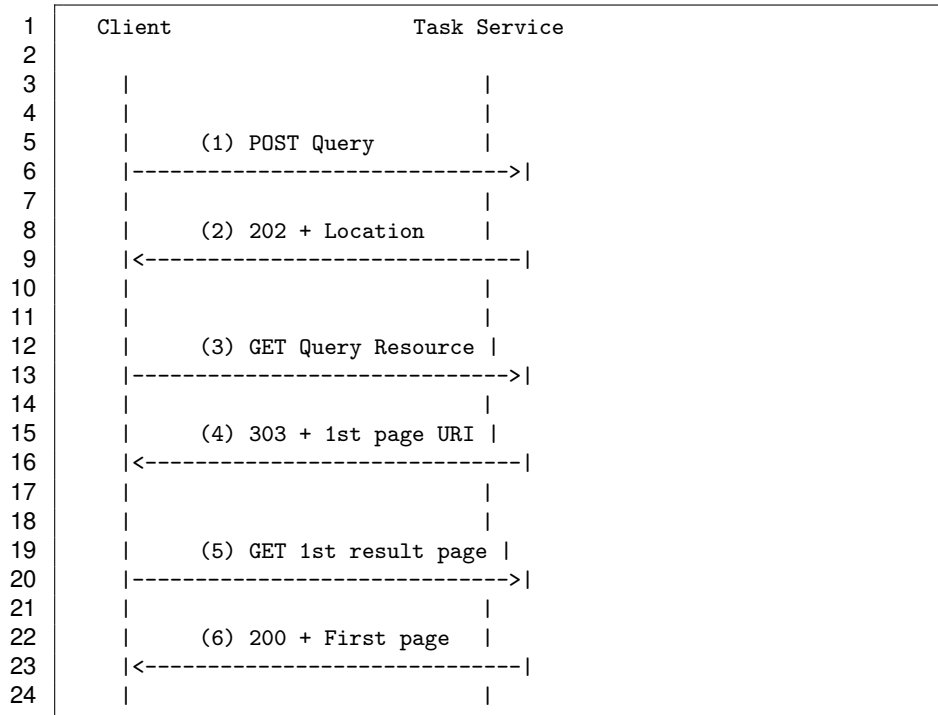
```
14         "link":{
15             "rel":"self",
16             "href":"http://www.diretto.org"
17         }
18     },
19 },
20 "direttoMainServices":{
21     "core":{
22         "link":{
23             "rel":"self",
24             "href":"http://coreservice/v2"
25         }
26     }
27 }
28 }
```

The JSON response contains information about the service identification and version, the actual deployment variables and links to the main service instance.



### 3 Query

An interface resource for query execution. A query must be dispatched to the server which will return a URI for the query. This URI then contains the results. Results are paginated using cursors. A query resource stores the initial query parameters, not the result set. Thus, queries can be re-executed by using the same URI, although the corresponding results may have changed. Be aware of this fact when applying caching to query results.



Note that step 5 and 6 must be repeated for additional result pages. Also, step 1 and 2 can be skipped if an existing query (client already knows query URI) should be re-executed.

`http://taskservice/v2/query/stored/``query-id`

`query-id` query id

#### 3.1 Dispatch a query

Sends a query.

##### URI

`http://taskservice/v2/query`

##### Parameters

## HTTP Method

POST

## Formats

- n/a

## Authentication

required

## Request Entities

```
1 {
2   "query":{
3     "time":{
4       "start": "2010-06-29T19:15:51.765Z",
5       "end": "2010-06-29T19:15:50.000Z"
6     },
7     "location":{
8       "bbox": [
9         100.0,
10        0.0,
11        105.0,
12        1.0
13      ]
14    },
15    "tags": [
16      "http://taskservice/v2/tag/
17        ef7987f2bd22f4a8cf236c83a57c1f6b"
18    ]
19  }
```

A query is built using three parameters. While time frame and spatial bounding box are mandatory, the tag list may be empty. Please note that all parameters are combined conjunctively (using boolean AND), thus each emitted result entry matches all of the parameters.

## Responses

202 Accepted Query accepted, result location in header.

400 Bad Request Invalid query parameters.

## Response Entities

n/a

## 3.2 Forward to query result page

A request to a query URI will always be forwarded to the first page of the result set using the first cursor.

## URI

`http://taskservice/v2/query`

## Parameters

## HTTP Method

GET

## Formats

- n/a

## Authentication

required

## Request Entities

n/a

## Responses

303 See Other Query accepted, result location in header.

404 Not Found Query not found.

## Response Entities

n/a

## 3.3 Execute a common location-based query

A set of predefined queries for tasks currently valid by time and the user's position. The type affects the order of the tasks emitted as results.

## URI

`http://taskservice/v2/query/common/`type`?lat=`latitude`&lon=`longitude

## Parameters

<b>type</b>	type: one of 'newest', 'unattended', 'expiring' or 'popular'
<b>latitude</b>	latitude
<b>longitude</b>	longitude

## HTTP Method

GET

## Formats

- n/a

## Authentication

required

## Request Entities

n/a

## Responses

303 See Other Query accepted, result location in header.

404 Not Found Invalid coordinates.

## Response Entities

n/a

### 3.4 Get query result page

Returns a paginated result page, identified by the cursor. A result page always contains links to the previous and next result page, if existing.

## URI

`http://taskservice/v2/query/stored/{query-id}/cursor/{cursor-id}`

## Parameters

<b>cursor-id</b>	cursor id
------------------	-----------

## HTTP Method

GET

## Formats

- n/a

## Authentication

required

## Request Entities

n/a

## Responses

200 OK Result page in response.

404 Not Found Query or cursor not found.

## Response Entities

```
1 {
2   "query":{
3     "id":"128ecf542a35ac5270a87dc740918404",
4     "link":{
5       "rel":"self",
6       "href":"http://taskservice/v2/query/stored/128
          ecf542a35ac5270a87dc740918404"
7     }
8   },
9   "results":{
10    "count":101,
11    "page":{
12      "link":{
13        "rel":"self",
14        "href":"http://taskservice/v2/query/stored/128
          ecf542a35ac5270a87dc740918404/cursor/def"
15      },
16      "list":[
17        {
18          "task":{
19            "id":"2671f383-a28c-44d5-b86b-f7f04bb0a015",
20            "link":{
21              "rel":"self",
22              "href":"http://taskservice/v2/task/2671f383-a28c
                -44d5-b86b-f7f04bb0a015"
23            }
24          }
25        }
26      ],
27      "related":[
28        {
29          "link":{
30            "rel":"first",
31            "href":"http://taskservice/v2/query/stored/128
          ecf542a35ac5270a87dc740918404/cursor/abc"
32          }
33        },
34        {
35          "link":{
36            "rel":"previous",
37            "href":"http://taskservice/v2/query/stored/128
          ecf542a35ac5270a87dc740918404/cursor/abc"
38          }
39        },
40        {
41          "link":{
```

```

42         "rel": "next",
43         "href": "http://taskservice/v2/query/stored/128
              ecf542a35ac5270a87dc740918404/cursor/ghi"
44     }
45 }
46 ]
47 }
48 }
49 }
```

A query result page containing links to the previous, next and first page.

## 4 Submission

This resource represents a submission. A submission basically suggests that a document represents a possible solution to the task.

`http://taskservice/v2/task/{task-id}/submission/{submission-id}`

<b>task-id</b>	task ID
<b>submission-id</b>	submission ID

### 4.1 Get all submissions of task

Returns all submissions of task.

#### URI

`http://taskservice/v2/task/{task-id}/submissions`

#### Parameters

<b>task-id</b>	task ID
----------------	---------

#### HTTP Method

GET

#### Formats

- application/json

#### Authentication

required

#### Request Entities

n/a

#### Responses

200 OK Submission list in response entity.

404 Not Found Task not found

#### Response Entities

```
1 {
2   "submissions":{
3     "link":{
4       "rel":"self",
5       "href":"http://taskservice/v2/task/eafbad70-7972-11e0-a1f0-0800200c9a66/submissions"
6     },
7     "list":[
8       {
```

```

9      "submission":{
10          "id":"550e8400-e29b-11d4-a716-446655440000",
11          "self":"http://taskservice/v2/task/2671f383-a28c-44d5-
              b86b-f7f04bb0a015/submission/550e8400-e29b-11d4-a716
              -446655440000"
12      },
13      "votes":{
14          "link":{
15              "rel":"self",
16              "href":"http://taskservice/v2/task/2671f383-a28c-44d5-
                  b86b-f7f04bb0a015/submission/550e8400-e29b-11d4-
                  a716-446655440000/votes"
17          },
18          "up":123,
19          "down":42
20      },
21      "document":{
22          "link":{
23              "rel":"self",
24              "href":"http://core/v2/document/550e8400-e29b-11
                  d4-a716-446655440000"
25          }
26      },
27      "creationTime":"2010-07-17T18:54:11.939Z",
28      "creator":{
29          "id":"123456",
30          "link":{
31              "rel":"self",
32              "href":"http://core/v2/user/123456"
33          }
34      },
35      "tags":{
36          "link":{
37              "rel":"self",
38              "href":"http://taskservice/v2/task/2671f383-a28c-44d5-
                  b86b-f7f04bb0a015/submission/550e8400-e29b-11d4-
                  a716-446655440000/tags"
39          },
40      "list":[
41          {
42              "tag":{
43                  "id":"ef7987f2bd22f4a8cf236c83a57c1f6b",
44                  "link":{
45                      "rel":"self",
46                      "href":"http://taskservice/v2/task/2671f383-
                          a28c-44d5-b86b-f7f04bb0a015/submission
                          /550e8400-e29b-11d4-a716-446655440000/tag
                          /ef7987f2bd22f4a8cf236c83a57c1f6b"
47                  },
48                  "baseTag":{
49                      "link":{
50                          "rel":"self",
51                          "href":"http://taskservice/v2/tag/
                              ef7987f2bd22f4a8cf236c83a57c1f6b"
52                      }

```



```

53         },
54         "value": "mytag",
55         "creationTime": "2010-07-17T18:54:11.939Z",
56         "creator": {
57             "id": "123456",
58             "link": {
59                 "rel": "self",
60                 "href": "http://core/v2/user/123456"
61             }
62         },
63         "votes": {
64             "link": {
65                 "rel": "self",
66                 "href": "http://taskservice/v2/task/2671
                        f383-a28c-44d5-b86b-f7f04bb0a015/
                        submission/550e8400-e29b-11d4-a716
                        -446655440000/tag/
                        ef7987f2bd22f4a8cf236c83a57c1f6b/votes
                        "
67             },
68             "up": 12,
69             "down": 2
70         }
71     }
72 }
73 ]
74 }
75 }
76 ]
77 }
78 }

```

## 4.2 Create a new submission

Creates a new submission. A submission is represented by a document, identified by its URI.

### URI

`http://taskservice/v2/task/task-id/submissions`

### Parameters

<b>task-id</b>	task ID
----------------	---------

### HTTP Method

POST

### Formats

- application/json

## Authentication

required

## Request Entities

```
1 {
2   "document":{
3     "link":{
4       "rel":"self",
5       "href":"http://core/v2/document/550e8400-e29b-11d4-a716
6         -446655440000"
7     }
8   }
```

An example submission of a document.

## Responses

201 Created The submission has been accepted. The location header contains its URI and thus also the submission id.

400 Bad Request The provided data are incomplete or invalid.

403 Forbidden The document does not represent a valid submission for this task (spatial location or time origin).

409 Conflict The document is already a submission for this task.

## Response Entities

```
1 {
2   "error":{
3     "reason":"The spatial location of the document is outside the
4       task area."
5   }
```

A rejected submission (403) of a document, here due to it's meta data.

## 4.3 Retrieve submission details

Provides detailed information about this submission.

### URI

`http://taskservice/v2/task/{task-id}/submission/{submission-id}`

### Parameters

## HTTP Method

GET

## Formats

- application/json

## Authentication

required

## Request Entities

n/a

## Responses

200 OK The submission details are available in the response entity.

404 Not Found Submission not found.

## Response Entities

```
1 {
2   "submission":{
3     "id":"550e8400-e29b-11d4-a716-446655440000",
4     "self":"http://taskservice/v2/task/2671f383-a28c-44d5-b86b-
        f7f04bb0a015/submission/550e8400-e29b-11d4-a716-446655440000
5     },
6   "votes":{
7     "link":{
8       "rel":"self",
9       "href":"http://taskservice/v2/task/2671f383-a28c-44d5-b86b-
        f7f04bb0a015/submission/550e8400-e29b-11d4-a716-
        446655440000/votes"
10    },
11    "up":123,
12    "down":42
13  },
14  "document":{
15    "link":{
16      "rel":"self",
17      "href":"http://core/v2/document/550e8400-e29b-11d4-a716-
        446655440000"
18    }
19  },
20  "creationTime":"2010-07-17T18:54:11.939Z",
21  "creator":{
22    "id":"123456",
23    "link":{
24      "rel":"self",
25      "href":"http://core/v2/user/123456"
```

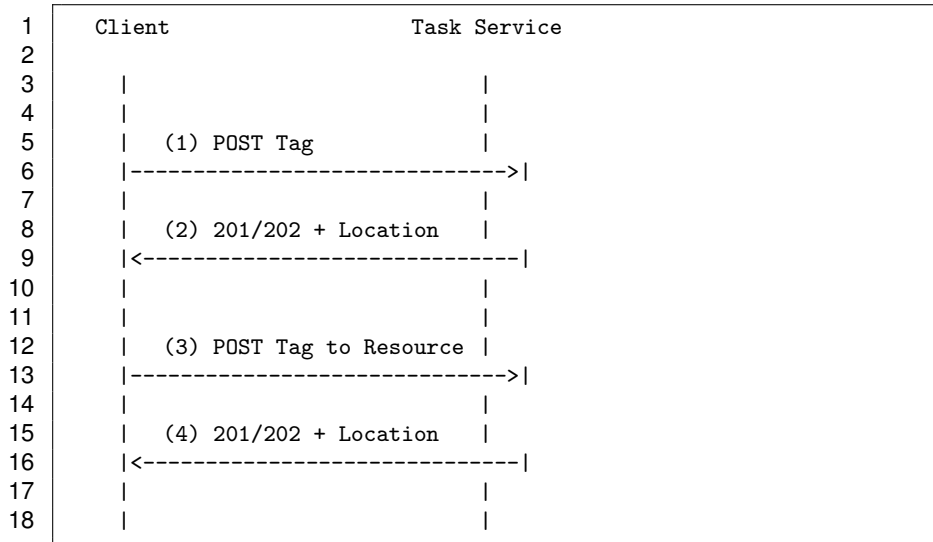
```

26     }
27 },
28 "tags":{
29     "link":{
30         "rel":"self",
31         "href":"http://taskservice/v2/task/2671f383-a28c-44d5-b86b-
            f7f04bb0a015/submission/550e8400-e29b-11d4-a716
            -446655440000/tags"
32     },
33     "list":[
34         {
35             "tag":{
36                 "id":"ef7987f2bd22f4a8cf236c83a57c1f6b",
37                 "link":{
38                     "rel":"self",
39                     "href":"http://taskservice/v2/task/2671f383-a28c-44d5-
                        b86b-f7f04bb0a015/submission/550e8400-e29b-11d4-
                        a716-446655440000/tag/
                        ef7987f2bd22f4a8cf236c83a57c1f6b"
40                 },
41                 "baseTag":{
42                     "link":{
43                         "rel":"self",
44                         "href":"http://taskservice/v2/tag/
                            ef7987f2bd22f4a8cf236c83a57c1f6b"
45                     }
46                 },
47                 "value":"mytag",
48                 "creationTime":"2010-07-17T18:54:11.939Z",
49                 "creator":{
50                     "id":"123456",
51                     "link":{
52                         "rel":"self",
53                         "href":"http://core/v2/user/123456"
54                     }
55                 },
56                 "votes":{
57                     "link":{
58                         "rel":"self",
59                         "href":"http://taskservice/v2/task/2671f383-a28c-
                            44d5-b86b-f7f04bb0a015/submission/550e8400-
                            e29b-11d4-a716-446655440000/tag/
                            ef7987f2bd22f4a8cf236c83a57c1f6b/votes"
60                     },
61                     "up":12,
62                     "down":2
63                 }
64             }
65         }
66     ]
67 }
68 }

```

## 5 Tag

This resource represents a tag. Users can append tags on various resources. The tag URI path is appended to the original URI. The following resources of the Task API can be voted on: *Task* and *Submission*



Steps 1+2 create a tag, steps 3+4 append the tag to a resource.

`http://taskservice/v2/tag/`tag-id

tag-id tag ID

### 5.1 Create a new tag

Create a new tag that can be appended to resource thereafter.

#### URI

`http://taskservice/v2/tags`

#### Parameters

#### HTTP Method

POST

#### Formats

- application/json

#### Authentication

required

### Request Entities

```
1 {  
2   "value": "mytag"  
3 }
```

### Responses

201 Created Tag has been created. The location header contains its URI and thus also the tag id.

202 Accepted Tag already exists, but accepted.

400 Bad Request Invalid tag data (i.e. length).

### Response Entities

```
1 {  
2   "baseTag": {  
3     "id": "ef7987f2bd22f4a8cf236c83a57c1f6b",  
4     "link": {  
5       "rel": "self",  
6       "href": "http://taskservice/v2/tag/  
               ef7987f2bd22f4a8cf236c83a57c1f6b"  
7     }  
8   }  
9 }
```

## 5.2 Retrieve a tag

Returns a tag entry.

### URI

`http://taskservice/v2/tag/`tag-id

### Parameters

### HTTP Method

GET

### Formats

- application/json

### Authentication

required

## Request Entities

n/a

## Responses

200 OK

404 Not Found Tag not found.

## Response Entities

```
1 {
2   "baseTag":{
3     "id":"ef7987f2bd22f4a8cf236c83a57c1f6b",
4     "link":{
5       "rel":"self",
6       "href":"http://taskservice/v2/tag/
          ef7987f2bd22f4a8cf236c83a57c1f6b"
7     },
8     "value":"mytag",
9     "creationTime":"2010-07-17T18:54:11.939Z",
10    "creator":{
11      "id":"123456",
12      "link":{
13        "rel":"self",
14        "href":"http://core/v2/user/123456"
15      }
16    }
17  }
18 }
```

Note that the creation time denotes the initial usage of this time.

## 5.3 Retrieve a single tag of a resource

Returns a single tag entry that has been appended to a resource.

### URI

`http://taskservice/v2/tag/``tag-id``/``resource``/tag/``tag-id`

### Parameters

<b>resource</b>	resource identifier
<b>tag-id</b>	tag ID

### HTTP Method

GET

### Formats

- application/json

## Authentication

required

## Request Entities

n/a

## Responses

200 OK

404 Not Found Resource not found.

## Response Entities

```
1  {
2    "tag":{
3      "id":"ef7987f2bd22f4a8cf236c83a57c1f6b",
4      "link":{
5        "rel":"self",
6        "href":"http://taskservice/v2/task/2671f383-a28c-44d5-b86b-
          f7f04bb0a015/tag/ef7987f2bd22f4a8cf236c83a57c1f6b"
7      },
8      "baseTag" : {
9        "link":{
10          "rel":"self",
11          "href":"http://taskservice/v2/tag/
            ef7987f2bd22f4a8cf236c83a57c1f6b"
12        }
13      },
14      "value":"mytag",
15      "creationTime":"2010-07-17T18:54:11.939Z",
16      "creator":{
17        "id":"123456",
18        "link":{
19          "rel":"self",
20          "href":"http://core/v2/user/123456"
21        }
22      },
23      "votes":{
24        "link":{
25          "rel":"self",
26          "href":"http://taskservice/v2/task/2671f383-a28c-44d5-b86b-
            f7f04bb0a015/tag/ef7987f2bd22f4a8cf236c83a57c1f6b/
              votes"
27        },
28        "up":12,
29        "down":2
30      }
31    }
32  }
```



Note that the creation time denotes the time this tag has been appended to the resource for the first time.

## 5.4 Append a tag to a resource

Appends a new tag to the resource.

### URI

`http://taskservice/v2/resource/tags`

### Parameters

<b>resource</b>	resource
-----------------	----------

### HTTP Method

POST

### Formats

- application/json

### Authentication

required

### Request Entities

```
1 {
2   "baseTag":{
3     "id":"ef7987f2bd22f4a8cf236c83a57c1f6b",
4     "link":{
5       "rel":"self",
6       "href":"http://taskservice/v2/tag/
           ef7987f2bd22f4a8cf236c83a57c1f6b"
7     }
8   }
9 }
```

### Responses

201 Created Tag has been appended. The location header contains its URI and thus also the tag id.

202 Accepted Tag already exists, but accepted.

400 Bad Request Invalid tag data (i.e. ID mismatch).

404 Not Found Tag or resource not found.

## Response Entities

n/a

## 5.5 Retrieve all tags of a resource

Returns a single tag entry.

## URI

`http://taskservice/v2/resource/tags`

## Parameters

<b>resource</b>	resource
-----------------	----------

## HTTP Method

GET

## Formats

- application/json

## Authentication

required

## Request Entities

n/a

## Responses

200 OK

404 Not Found Resource not found.

## Response Entities

```
1 {
2   "tags":{
3     "link":{
4       "rel":"self",
5       "href":"http://taskservice/v2/resource/tags"
6     },
7     "list":[
8       {
9         "tag":{
10          "id":"ef7987f2bd22f4a8cf236c83a57c1f6b",
11          "link":{
12            "rel":"self",
```

```

13         "href":"http://taskservice/v2/task/2671f383-a28c-44d5-
        b86b-f7f04bb0a015/tag/
        ef7987f2bd22f4a8cf236c83a57c1f6b"
14     },
15     "baseTag":{
16         "link":{
17             "rel":"self",
18             "href":"http://taskservice/v2/tag/
        ef7987f2bd22f4a8cf236c83a57c1f6b"
19         }
20     },
21     "value":"mytag",
22     "creationTime":"2010-07-17T18:54:11.939Z",
23     "creator":{
24         "id":"123456",
25         "link":{
26             "rel":"self",
27             "href":"http://core/v2/user/123456"
28         }
29     },
30     "votes":{
31         "link":{
32             "rel":"self",
33             "href":"http://taskservice/v2/task/2671f383-a28c-
        -44d5-b86b-f7f04bb0a015/tag/
        ef7987f2bd22f4a8cf236c83a57c1f6b/votes"
34         },
35         "up":12,
36         "down":2
37     }
38 }
39 }
40 ]
41 }
42 }

```

## 6 Task

This resource represents a task.

`http://taskservice/v2/task/`task-id  
task-id task ID

### 6.1 Retrieve a single task snapshot

Returns a complete set of data of this task, including comments, votes and submissions.

#### URI

`http://taskservice/v2/task/`task-id`/snapshot`

#### Parameters

#### HTTP Method

GET

#### Formats

- application/json

#### Authentication

required

#### Request Entities

n/a

#### Responses

200 OK

404 Not Found

#### Response Entities

```
1 {  
2   "task": {  
3     "id": "2671f383-a28c-44d5-b86b-f7f04bb0a015",  
4     "link": {  
5       "rel": "self",  
6       "href": "http://taskservice/v2/task/2671f383-a28c-44d5-b86b-f7f04bb0a015"  
7     },  
8     "constraints": {  
9       "time": {
```

```

10         "start": "2010-06-29T19:15:51.765Z",
11         "end": "2010-06-29T19:15:50.000Z"
12     },
13     "location": {
14         "bbox": [
15             100.0,
16             0.0,
17             105.0,
18             1.0
19         ]
20     }
21 },
22 "title": "foo bar",
23 "description": "foo bar asd lorem",
24 "creationTime": "2010-07-17T18:54:11.939Z",
25 "creator": {
26     "id": "123456",
27     "link": {
28         "rel": "self",
29         "href": "http://core/v2/user/123456"
30     }
31 }
32 },
33 "submissions": {
34     "link": {
35         "rel": "self",
36         "href": "http://taskservice/v2/task/eafbad70-7972-11e0-a1f0-0800200c9a66/submissions"
37     },
38     "list": [
39         {
40             "submission": {
41                 "id": "550e8400-e29b-11d4-a716-446655440000",
42                 "self": "http://taskservice/v2/task/2671f383-a28c-44d5-b86b-f7f04bb0a015/submission/550e8400-e29b-11d4-a716-446655440000"
43             },
44             "votes": {
45                 "link": {
46                     "rel": "self",
47                     "href": "http://taskservice/v2/task/2671f383-a28c-44d5-b86b-f7f04bb0a015/submission/550e8400-e29b-11d4-a716-446655440000/votes"
48                 },
49                 "up": 123,
50                 "down": 42
51             },
52             "document": {
53                 "link": {
54                     "rel": "self",
55                     "href": "http://core/v2/document/550e8400-e29b-11d4-a716-446655440000"
56                 }
57             },
58             "creationTime": "2010-07-17T18:54:11.939Z",

```

```

59     "creator":{
60         "id":"123456",
61         "link":{
62             "rel":"self",
63             "href":"http://core/v2/user/123456"
64         }
65     },
66     "tags":{
67         "link":{
68             "rel":"self",
69             "href":"http://taskservice/v2/task/2671f383-a28c-44d5-
            b86b-f7f04bb0a015/submission/550e8400-e29b-11d4-
            a716-446655440000/tags"
70         },
71         "list":[
72             {
73                 "tag":{
74                     "id":"ef7987f2bd22f4a8cf236c83a57c1f6b",
75                     "link":{
76                         "rel":"self",
77                         "href":"http://taskservice/v2/task/2671f383-
                            a28c-44d5-b86b-f7f04bb0a015/submission
                            /550e8400-e29b-11d4-a716-446655440000/tag
                            /ef7987f2bd22f4a8cf236c83a57c1f6b"
78                     },
79                     "baseTag":{
80                         "link":{
81                             "rel":"self",
82                             "href":"http://taskservice/v2/tag/
                                ef7987f2bd22f4a8cf236c83a57c1f6b"
83                         }
84                     },
85                     "value":"mytag",
86                     "creationTime":"2010-07-17T18:54:11.939Z",
87                     "creator":{
88                         "id":"123456",
89                         "link":{
90                             "rel":"self",
91                             "href":"http://core/v2/user/123456"
92                         }
93                     },
94                     "votes":{
95                         "link":{
96                             "rel":"self",
97                             "href":"http://taskservice/v2/task/2671
                                f383-a28c-44d5-b86b-f7f04bb0a015/
                                submission/550e8400-e29b-11d4-a716
                                -446655440000/tag/
                                ef7987f2bd22f4a8cf236c83a57c1f6b/votes
                                "
98                         },
99                         "up":12,
100                        "down":2
101                    }
102                }
            }
        ]
    }
}

```

```

103         }
104     ]
105 }
106 }
107 ]
108 },
109 "comments":{
110     "link":{
111         "rel":"self",
112         "href":"http://taskservice/v2/task/eafbad70-7972-11e0-a1f0-0800200c9a66/comments"
113     },
114     "list":[
115         {
116             "comment":{
117                 "id":"8e252710-77cf-11e0-a1f0-0800200c9a66",
118                 "link":{
119                     "rel":"self",
120                     "href":"http://taskservice/v2/task/eafbad70-7972-11e0-a1f0-0800200c9a66/comment/8e252710-77cf-11e0-a1f0-0800200c9a66"
121                 },
122                 "content":"blablabla",
123                 "creationTime":"2010-07-17T18:54:11.939Z",
124                 "creator":{
125                     "id":"123456",
126                     "link":{
127                         "rel":"self",
128                         "href":"http://core/v2/user/123456"
129                     }
130                 },
131                 "votes":{
132                     "link":{
133                         "rel":"self",
134                         "href":"http://taskservice/v2/task/2671f383-a28c-44d5-b86b-f7f04bb0a015/tag/ef7987f2bd22f4a8cf236c83a57c1f6b/votes"
135                     },
136                     "up":12,
137                     "down":2
138                 }
139             }
140         }
141     ]
142 },
143 "tags":{
144     "link":{
145         "rel":"self",
146         "href":"http://taskservice/v2/resource/tags"
147     },
148     "list":[
149         {
150             "tag":{
151                 "id":"ef7987f2bd22f4a8cf236c83a57c1f6b",
152                 "link":{

```

```

153         "rel": "self",
154         "href": "http://taskservice/v2/task/2671f383-a28c-44d5-
            b86b-f7f04bb0a015/tag/
            ef7987f2bd22f4a8cf236c83a57c1f6b"
155     },
156     "baseTag": {
157         "link": {
158             "rel": "self",
159             "href": "http://taskservice/v2/tag/
                ef7987f2bd22f4a8cf236c83a57c1f6b"
160         }
161     },
162     "value": "mytag",
163     "creationTime": "2010-07-17T18:54:11.939Z",
164     "creator": {
165         "id": "123456",
166         "link": {
167             "rel": "self",
168             "href": "http://core/v2/user/123456"
169         }
170     },
171     "votes": {
172         "link": {
173             "rel": "self",
174             "href": "http://taskservice/v2/task/2671f383-a28c-
                44d5-b86b-f7f04bb0a015/tag/
                ef7987f2bd22f4a8cf236c83a57c1f6b/votes"
175         },
176         "up": 12,
177         "down": 2
178     }
179 }
180 }
181 ]
182 }
183 }

```

## 6.2 Fetch multiple task snapshots

Fetches a set of task snapshots.

### URI

`http://taskservice/v2/task/task-id/snapshot`

### Parameters

### HTTP Method

POST



## Formats

- application/json

## Authentication

required

## Request Entities

```
1 {
2   "tasks": [
3     "http://taskservice/v2/task/2671f383-a28c-44d5-b86b-f7f04bb0a015",
4     "http://taskservice/v2/task/2671f383-a28c-b1a"
5   ]
6 }
```

## Responses

200 OK Results in response body. Note that tasks may still have raised errors (i.e. when not found).

400 Bad Request Invalid query or too many items requested.

## Response Entities

```
1 {
2   "results": {
3     "http://taskservice/v2/task/2671f383-a28c-b1a": {
4       "error": {
5         "message": "Not found"
6       }
7     },
8     "http://taskservice/v2/task/2671f383-a28c-44d5-b86b-f7f04bb0a015": {
9       "task": {
10        "id": "2671f383-a28c-44d5-b86b-f7f04bb0a015",
11        "link": {
12          "rel": "self",
13          "href": "http://taskservice/v2/task/2671f383-a28c-44d5-b86b-f7f04bb0a015"
14        },
15        "constraints": {
16          "time": {
17            "start": "2010-06-29T19:15:51.765Z",
18            "end": "2010-06-29T19:15:50.000Z"
19          },
20          "location": {
21            "bbox": [
22              100.0,
23              0.0,
```

```

24         105.0,
25         1.0
26     ]
27 }
28 },
29 "title":"foo bar",
30 "description":"foo bar asd lorem",
31 "creationTime":"2010-07-17T18:54:11.939Z",
32 "creator":{
33     "id":"123456",
34     "link":{
35         "rel":"self",
36         "href":"http://core/v2/user/123456"
37     }
38 }
39 },
40 "submissions":{
41     "link":{
42         "rel":"self",
43         "href":"http://taskservice/v2/task/eafbad70-7972-11e0-
44             a1f0-0800200c9a66/submissions"
45     },
46     "list":[
47         {
48             "submission":{
49                 "id":"550e8400-e29b-11d4-a716-446655440000",
50                 "self":"http://taskservice/v2/task/2671f383-a28c
51                     -44d5-b86b-f7f04bb0a015/submission/550e8400-
52                     e29b-11d4-a716-446655440000"
53             },
54             "votes":{
55                 "link":{
56                     "rel":"self",
57                     "href":"http://taskservice/v2/task/2671f383-a28c
58                         -44d5-b86b-f7f04bb0a015/submission/550e8400-
59                         e29b-11d4-a716-446655440000/votes"
60                 },
61                 "up":123,
62                 "down":42
63             },
64             "document":{
65                 "link":{
66                     "rel":"self",
67                     "href":"http://core/v2/document/550e8400-e29b-11
68                         d4-a716-446655440000"
69                 }
70             },
71             "creationTime":"2010-07-17T18:54:11.939Z",
72             "creator":{
73                 "id":"123456",
74                 "link":{
75                     "rel":"self",
76                     "href":"http://core/v2/user/123456"
77                 }
78             }
79         }
80     ],
81     "creationTime":"2010-07-17T18:54:11.939Z",
82     "creator":{
83         "id":"123456",
84         "link":{
85             "rel":"self",
86             "href":"http://core/v2/user/123456"
87         }
88     }
89 }

```

```

73     "tags":{
74         "link":{
75             "rel":"self",
76             "href":"http://taskservice/v2/task/2671f383-a28c
-44d5-b86b-f7f04bb0a015/submission/550e8400-
e29b-11d4-a716-446655440000/tags"
77         },
78         "list":[
79             {
80                 "tag":{
81                     "id":"ef7987f2bd22f4a8cf236c83a57c1f6b",
82                     "link":{
83                         "rel":"self",
84                         "href":"http://taskservice/v2/task/2671
f383-a28c-44d5-b86b-f7f04bb0a015/
submission/550e8400-e29b-11d4-a716
-446655440000/tag/
ef7987f2bd22f4a8cf236c83a57c1f6b"
85                     },
86                     "baseTag":{
87                         "link":{
88                             "rel":"self",
89                             "href":"http://taskservice/v2/tag/
ef7987f2bd22f4a8cf236c83a57c1f6b"
90                         }
91                     },
92                     "value":"mytag",
93                     "creationTime":"2010-07-17T18:54:11.939Z",
94                     "creator":{
95                         "id":"123456",
96                         "link":{
97                             "rel":"self",
98                             "href":"http://core/v2/user/123456"
99                         }
100                     },
101                     "votes":{
102                         "link":{
103                             "rel":"self",
104                             "href":"http://taskservice/v2/task
/2671f383-a28c-44d5-b86b-
f7f04bb0a015/submission/550e8400-
e29b-11d4-a716-446655440000/tag/
ef7987f2bd22f4a8cf236c83a57c1f6b/
votes"
105                         },
106                         "up":12,
107                         "down":2
108                     }
109                 }
110             }
111         ]
112     }
113 }
114 ]
115 },

```

```

116     "comments":{
117         "link":{
118             "rel":"self",
119             "href":"http://taskservice/v2/task/eafbad70-7972-11e0-
                a1f0-0800200c9a66/comments"
120         },
121         "list":[
122             {
123                 "comment":{
124                     "id":"8e252710-77cf-11e0-a1f0-0800200c9a66",
125                     "link":{
126                         "rel":"self",
127                         "href":"http://taskservice/v2/task/eafbad70
                            -7972-11e0-a1f0-0800200c9a66/comment/8
                            e252710-77cf-11e0-a1f0-0800200c9a66"
128                     },
129                     "content":"blablabla",
130                     "creationTime":"2010-07-17T18:54:11.939Z",
131                     "creator":{
132                         "id":"123456",
133                         "link":{
134                             "rel":"self",
135                             "href":"http://core/v2/user/123456"
136                         }
137                     },
138                     "votes":{
139                         "link":{
140                             "rel":"self",
141                             "href":"http://taskservice/v2/task/2671f383-
                                a28c-44d5-b86b-f7f04bb0a015/tag/
                                ef7987f2bd22f4a8cf236c83a57c1f6b/votes"
142                         },
143                         "up":12,
144                         "down":2
145                     }
146                 }
147             }
148         ]
149     },
150     "tags":{
151         "link":{
152             "rel":"self",
153             "href":"http://taskservice/v2/resource/tags"
154         },
155         "list":[
156             {
157                 "tag":{
158                     "id":"ef7987f2bd22f4a8cf236c83a57c1f6b",
159                     "link":{
160                         "rel":"self",
161                         "href":"http://taskservice/v2/task/2671f383-a28c
                            -44d5-b86b-f7f04bb0a015/tag/
                            ef7987f2bd22f4a8cf236c83a57c1f6b"
162                     },
163                     "baseTag":{

```

```

164         "link":{
165             "rel":"self",
166             "href":"http://taskservice/v2/tag/
                ef7987f2bd22f4a8cf236c83a57c1f6b"
167         }
168     },
169     "value":"mytag",
170     "creationTime":"2010-07-17T18:54:11.939Z",
171     "creator":{
172         "id":"123456",
173         "link":{
174             "rel":"self",
175             "href":"http://core/v2/user/123456"
176         }
177     },
178     "votes":{
179         "link":{
180             "rel":"self",
181             "href":"http://taskservice/v2/task/2671f383-
                a28c-44d5-b86b-f7f04bb0a015/tag/
                ef7987f2bd22f4a8cf236c83a57c1f6b/votes"
182         },
183         "up":12,
184         "down":2
185     }
186 }
187 }
188 ]
189 }
190 }
191 }
192 }

```

### 6.3 Retrieve task meta data

Returns all meta data of this task.

#### URI

`http://taskservice/v2/task/`task-id

#### Parameters

#### HTTP Method

GET

#### Formats

- application/json

## Authentication

required

## Request Entities

n/a

## Responses

200 OK

404 Not Found

## Response Entities

```
1 {
2   "task":{
3     "id":"2671f383-a28c-44d5-b86b-f7f04bb0a015",
4     "link":{
5       "rel":"self",
6       "href":"http://taskservice/v2/task/2671f383-a28c-44d5-b86b-
          f7f04bb0a015"
7     },
8     "constraints":{
9       "time":{
10        "start":"2010-06-29T19:15:51.765Z",
11        "end":"2010-06-29T19:15:50.000Z"
12      },
13      "location":{
14        "bbox":[
15          100.0,
16          0.0,
17          105.0,
18          1.0
19        ]
20      }
21    },
22    "title":"foo bar",
23    "description":"foo bar asd lorem",
24    "creationTime":"2010-07-17T18:54:11.939Z",
25    "creator":{
26      "id":"123456",
27      "link":{
28        "rel":"self",
29        "href":"http://core/v2/user/123456"
30      }
31    }
32  },
33  "submissions":{
34    "link":{
35      "rel":"self",
36      "href":"http://taskservice/v2/task/eafbad70-7972-11e0-a1f0-
          0800200c9a66/submissions"
```

```

37     }
38 },
39 "comments":{
40     "link":{
41         "rel":"self",
42         "href":"http://taskservice/v2/task/eafbad70-7972-11e0-a1f0
           -0800200c9a66/comments"
43     }
44 },
45 "tags":{
46     "link":{
47         "rel":"self",
48         "href":"http://taskservice/v2/task/2671f383-a28c-44d5-b86b-
           f7f04bb0a015/tags"
49     }
50 }
51 }

```

## 6.4 Create a new task

Creates a new task.

### URI

`http://taskservice/v2/tasks`

### Parameters

### HTTP Method

POST

### Formats

- application/json

### Authentication

required

### Request Entities

```

1 {
2   "constraints":{
3     "time":{
4       "start":"2010-06-29T19:15:51.765Z",
5       "end":"2010-06-29T19:15:50.000Z"
6     },
7     "location":{
8       "bbox": [100.0, 0.0, 105.0, 1.0]

```

```
9      }
10    },
11    "title":"foo bar",
12    "description":"foo bar asd lorem"
13  }
```

### Responses

201 Created Task has been created. The location header contains its URI and thus also the task id.

400 Bad Request The provided data are incomplete or invalid.

### Response Entities

n/a



## 7 Vote

This resource represents a vote. Users can vote on various resources. The voting URI path is appended to the original URI. The following resources of the Task API can be voted on: *Task* , *Submission* , *Comment* and *Tag* (for tasks and submissions)

`http://taskservice/v2/[resource]/vote/user/[user-id]`

<b>resource</b>	resource identifier
<b>user-id</b>	user ID

### 7.1 Vote on a resource

Casts a vote by the user authenticating the request.

#### URI

`http://taskservice/v2/[resource]/vote/user/[user-id]/[vote]`

#### Parameters

<b>vote</b>	up or down
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#### HTTP Method

PUT

#### Formats

- n/a

#### Authentication

required

#### Request Entities

n/a

#### Responses

202 Accepted Vote has been casted.

403 Forbidden Mismatch of voting and authenticated user.

#### Response Entities

n/a

### 7.2 Get a vote of the user

Returns the current vote of the user authenticating the request.

#### URI

`http://taskservice/v2/[resource]/vote/user/[user-id]`

## Parameters

## HTTP Method

GET

## Formats

- n/a

## Authentication

required

## Request Entities

n/a

## Responses

200 OK Vote in response body.

403 Forbidden Mismatch of voted and authenticated user.

404 Not Found User has not yet voted

## Response Entities

"vote": "up"

1	"vote": "up"
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A response containing an up-vote. "vote": "down"

1	"vote": "down"
---	----------------

A response containing a down-vote.

## 7.3 Get all votes

Returns a summary of all votes for this resource.

## URI

http://taskservice/v2/resource/votes

## Parameters

<b>resource</b>	resource identifier
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## HTTP Method

GET

### Formats

- n/a

### Authentication

required

### Request Entities

n/a

### Responses

200 OK Votes in response body.

404 Not Found Resource not found

### Response Entities

```
"votes":  
  "up":123,  
  "down":42
```

1	"votes": {"up": 123, "down": 42}
---	----------------------------------

## 7.4 Undo a vote on a resource

Undos a vote that has been casted before.

### URI

`http://taskservice/v2/{resource}/vote/user/{user-id}`

### Parameters

### HTTP Method

DELETE

### Formats

- n/a

### Authentication

required

### Request Entities

n/a

### **Responses**

204 No Content Vote has been removed.

403 Forbidden Mismatch of voting and authenticated user.

404 Not Found No vote found.

### **Response Entities**

n/a