Taiga *Webhooks* 

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Taiga webhooks notify changes on milestones, user stories, tasks, issues and wiki pages sending POST requests signed with a private key, to the configured urls.

Each project can have any number of webhooks configured on it.

# 1. Configuration

To activate webhooks you must configure taiga-back local settings file ~/taiga-back/settings/local.py adding the WEBHOOKS\_ENABLED = True.

Moreover there is another setting to disallow webhooks access to reserved and private address, see [IANA IPv4 Special-Purpose Address](https://www.iana.org/assignments/iana-ipv4-special-registry/iana-ipv4-special-registry.xhtml) and [IANA IPv6 Special-Purpose Address](https://www.iana.org/assignments/iana-ipv6-special-registry/iana-ipv6-special-registry.xhtml). To activate add also to your settings file WEBHOOKS\_BLOCK\_PRIVATE\_ADDRESS = True.

# 2. Request

The request made by the Taiga webhooks can be synchronous or asynchronous (it depends on the Taiga configuration, for example tree.taiga.io is async). In asynchronous mode those requests to your configured url can have a delay of some seconds.

All request send to the URL are POST with header Content-Type equals to application/json and a signature of the message in the X-TAIGA-WEBHOOK-SIGNATURE HTTP header.

The body of the POST request is just a JSON with the corresponding payload.

# 3. Verify signature

Every request have a header called X-TAIGA-WEBHOOK-SIGNATURE that contains the signature generated with [HMAC](http://en.wikipedia.org/wiki/Hash-based\_message\_authentication\_code) using shall hash.

An example of signature verification in python:

```
def verify_signature(key, data, signature):
    mac = hmac.new(key.encode("utf-8"), msg=data, digestmod=hashlib.sha1)
    return mac.hexdigest() == signature
```

in php:

```
<?php
  function verify_signature($key, $data, $signature) {
    return hash_hmac("sha1", $data , $key) == $signature
  }
?>
```

# 4. Payloads

The sended request depends on the object type and the kind of change, all payloads have the same base structure

```
{
   "action": "",
   "type": "",
   "by": {}
   "date": ""
   "data": {},
   "change": {}
}
```

- The action field contains notification type with values: "create", "delete", "change" or "test".
- The type field contains the type of object with values: "milestone", "userstory", "task", "issue", "wikipage" or "test".
- The by field contains the information of the user thast generate the notification.
- The date field contains the date and time of thwe current notification.
- The data field contains the current object information.
- The change field (only present on change notifications) contains the information about the changes made.

## 4.1. Test payload

```
{
    "type": "test",
    "by": {
        "id": 6,
        "permalink": "http://localhost:9001/profile/user1",
        "username": "user1",
        "full_name": "Purificacion Montero",
        "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
        "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
   },
   "date": "2016-04-12T12:00:56.335Z",
    "action": "test",
    "data": {
        "test": "test"
   }
}
```

## 4.2. Milestone payloads

### 4.2.1. Create

```
{
    "type": "milestone",
    "by": {
        "id": 6,
        "permalink": "http://localhost:9001/profile/user1",
        "username": "user1",
        "full_name": "Purificacion Montero",
        "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
        "gravatar id": "464bb6d514c3ecece1b87136ceeda1da"
    },
    "date": "2016-04-12T12:08:18.309Z",
    "action": "create",
    "data": {
        "permalink": "http://localhost:9001/project/project-0/taskboard/sprint-4",
        "project": {
            "id": 1,
            "permalink": "http://localhost:9001/project/project-0",
            "name": "Project Example 0",
            "logo_big_url": null
        },
        "owner": {
            "id": 6,
            "permalink": "http://localhost:9001/profile/user1",
            "username": "user1",
            "full_name": "Purificacion Montero",
            "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
            "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
        },
        "id": 13,
        "name": "Sprint 4",
        "slug": "sprint-4",
        "estimated_start": "2016-03-02",
        "estimated_finish": "2016-03-16",
        "created_date": "2016-04-12T12:08:18+0000",
        "modified_date": "2016-04-12T12:08:18+0000",
        "closed": false,
        "disponibility": 0.0
   }
}
```

### **4.2.2.** Delete

```
{
    "type": "milestone",
    "by": {
        "id": 6,
        "permalink": "http://localhost:9001/profile/user1",
        "username": "user1",
        "full_name": "Purificacion Montero",
        "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
        "gravatar id": "464bb6d514c3ecece1b87136ceeda1da"
    },
    "date": "2016-04-12T12:13:47.873Z",
    "action": "delete",
    "data": {
        "permalink": "http://localhost:9001/project/project-0/taskboard/sprint-4",
        "project": {
            "id": 1,
            "permalink": "http://localhost:9001/project/project-0",
            "name": "Project Example 0",
            "logo_big_url": null
        },
        "owner": {
            "id": 6,
            "permalink": "http://localhost:9001/profile/user1",
            "username": "user1",
            "full_name": "Purificacion Montero",
            "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
            "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
        },
        "id": 13,
        "name": "Sprint 4",
        "slug": "sprint-4",
        "estimated start": "2016-03-02",
        "estimated_finish": "2016-03-24",
        "created_date": "2016-04-12T12:08:18+0000",
        "modified_date": "2016-04-12T12:09:42+0000",
        "closed": false,
        "disponibility": 0.0
   }
}
```

### **4.2.3. Change**

```
{
  "type": "milestone",
  "by": {
     "id": 6,
     "permalink": "http://localhost:9001/profile/user1",
     "username": "user1",
     "full_name": "Purificacion Montero",
```

```
"photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
        "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
    },
    "action": "change",
    "data": {
        "permalink": "http://localhost:9001/project/project-0/taskboard/sprint-4",
        "project": {
            "id": 1,
            "permalink": "http://localhost:9001/project/project-0",
            "name": "Project Example 0",
            "logo_big_url": null
        },
        "owner": {
            "id": 6,
            "permalink": "http://localhost:9001/profile/user1",
            "username": "user1",
            "full_name": "Purificacion Montero",
            "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
            "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
        },
        "id": 13,
        "name": "Sprint 4",
        "slug": "sprint-4",
        "estimated_start": "2016-03-02",
        "estimated_finish": "2016-03-24",
        "created_date": "2016-04-12T12:08:18+0000",
        "modified date": "2016-04-12T12:09:42+0000",
        "closed": false,
        "disponibility": 0.0
    "date": "2016-04-12T12:09:42.527Z",
    "change": {
        "diff": {
            "estimated_start": {
                "to": "2016-03-02",
                "from": "2016-03-02"
            },
            "estimated_finish": {
                "to": "2016-03-24",
                "from": "2016-03-16"
            }
        },
        "comment": "",
        "comment html": "",
        "delete comment date": null
   }
}
```

## 4.3. User story data information

### 4.3.1. Create

```
{
    "type": "userstory",
    "date": "2016-04-12T12:17:20.486Z",
    "action": "create",
    "data": {
        "custom_attributes_values": {},
        "watchers": [],
        "permalink": "http://localhost:9001/project/project-0/us/72",
        "tags": [
            "dolorum",
            "adipisci",
            "ipsa"
        ],
        "external_reference": null,
        "project": {
            "id": 1,
            "permalink": "http://localhost:9001/project/project-0",
            "name": "Project Example 0",
            "logo big url": null
        },
        "owner": {
            "id": 6.
            "permalink": "http://localhost:9001/profile/user1",
            "username": "user1",
            "full_name": "Purificacion Montero",
            "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
            "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
        },
        "assigned_to": null,
        "points": [
            {
                "role": "UX",
                "name": "5",
                "value": 5.0
            },
                "role": "Design",
                "name": "1",
                "value": 1.0
            },
                "role": "Front",
                "name": "3",
                "value": 3.0
            },
```

```
"role": "Back",
                "name": "40",
                "value": 40.0
            }
        ],
        "status": {
            "id": 1,
            "name": "New",
            "slug": "new",
            "color": "#999999",
            "is_closed": false,
            "is archived": false
        },
        "milestone": null,
        "id": 139,
        "is_blocked": true,
        "blocked_note": "Blocked test message",
        "ref": 72,
        "is_closed": false,
        "created_date": "2016-04-12T12:17:19+0000",
        "modified date": "2016-04-12T12:17:19+0000",
        "finish_date": null,
        "subject": "test user story 5",
        "description": "this is a test description",
        "client_requirement": false,
        "team_requirement": true,
        "generated_from_issue": null,
        "tribe_gig": null
   },
    "by": {
        "id": 6,
        "permalink": "http://localhost:9001/profile/user1",
        "username": "user1",
        "full_name": "Purificacion Montero",
        "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
        "gravatar id": "464bb6d514c3ecece1b87136ceeda1da"
   }
}
```

### 4.3.2. Delete

```
"type": "userstory",
    "date": "2016-04-12T12:19:19.433Z",
    "action": "delete",
    "data": {
        "custom_attributes_values": null,
        "watchers": [],
        "permalink": "http://localhost:9001/project/project-0/us/72",
        "tags": [
```

```
"dolorum",
            "adipisci",
            "ipsa"
        ],
        "external_reference": null,
        "project": {
            "id": 1,
            "permalink": "http://localhost:9001/project/project-0",
            "name": "Project Example 0",
            "logo_big_url": null
        },
        "owner": {
            "id": 6,
            "permalink": "http://localhost:9001/profile/user1",
            "username": "user1",
            "full_name": "Purificacion Montero",
            "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
            "gravatar id": "464bb6d514c3ecece1b87136ceeda1da"
        "assigned_to": null,
        "points": [],
        "status": {
            "id": 1,
            "name": "New",
            "slug": "new",
            "color": "#999999",
            "is closed": false,
            "is_archived": false
        },
        "milestone": {
            "permalink": "http://localhost:9001/project/project-0/taskboard/sprint-
2016-2-16",
            "project": {
                "id": 1,
                "permalink": "http://localhost:9001/project/project-0",
                "name": "Project Example 0",
                "logo_big_url": null
            },
            "owner": {
                "id": 4,
                "permalink": "http://localhost:9001/profile/admin",
                "username": "admin",
                "full_name": "Administrator",
                "photo": "//media.taiga.io/avatar.80x80 g85 crop.png",
                "gravatar id": "464bb6d514c3ecece1b87136ceeda1da"
            },
            "id": 1,
            "name": "Sprint 2016-2-16",
            "slug": "sprint-2016-2-16",
            "estimated_start": "2016-02-16",
            "estimated_finish": "2016-03-02",
```

```
"created_date": "2016-02-16T13:15:03+0000",
            "modified_date": "2016-04-11T13:15:03+0000",
            "closed": false,
            "disponibility": 0.0
        },
        "id": 139,
        "is_blocked": true,
        "blocked_note": "Blocked test message",
        "ref": 72,
        "is_closed": false,
        "created_date": "2016-04-12T12:17:19+0000",
        "modified date": "2016-04-12T12:18:19+0000",
        "finish_date": null,
        "subject": "test user story 5",
        "description": "this is a test description",
        "client_requirement": false,
        "team_requirement": true,
        "generated_from_issue": null,
        "tribe_gig": null
    },
    "by": {
        "id": 6,
        "permalink": "http://localhost:9001/profile/user1",
        "username": "user1",
        "full_name": "Purificacion Montero",
        "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
        "gravatar id": "464bb6d514c3ecece1b87136ceeda1da"
   }
}
```

### **4.3.3. Change**

```
{
    "type": "userstory",
    "date": "2016-04-12T12:18:19.685Z",
    "change": {
        "diff": {
            "milestone": {
                "to": "Sprint 2016-2-16",
                "from": null
            }
        },
        "comment": "",
        "comment html": "",
        "delete_comment_date": null
    },
    "action": "change",
    "data": {
        "custom attributes values": {},
        "watchers": [],
```

```
"permalink": "http://localhost:9001/project/project-0/us/72",
"tags": [
    "dolorum",
    "adipisci",
    "ipsa"
],
"external_reference": null,
"project": {
    "id": 1,
    "permalink": "http://localhost:9001/project/project-0",
    "name": "Project Example 0",
    "logo big url": null
},
"owner": {
    "id": 6,
    "permalink": "http://localhost:9001/profile/user1",
    "username": "user1",
    "full_name": "Purificacion Montero",
    "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
    "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
},
"assigned_to": null,
"points": [
    {
        "role": "UX",
        "name": "5",
        "value": 5.0
    },
        "role": "Design",
        "name": "1",
        "value": 1.0
    },
    {
        "role": "Front",
        "name": "3",
        "value": 3.0
    },
    {
        "role": "Back",
        "name": "40",
        "value": 40.0
    }
],
"status": {
    "id": 1,
    "name": "New",
    "slug": "new",
    "color": "#999999",
    "is_closed": false,
    "is_archived": false
```

```
},
        "milestone": {
            "permalink": "http://localhost:9001/project/project-0/taskboard/sprint-
2016-2-16",
            "project": {
                "id": 1,
                "permalink": "http://localhost:9001/project/project-0",
                "name": "Project Example 0",
                "logo big url": null
            },
            "owner": {
                "id": 4,
                "permalink": "http://localhost:9001/profile/admin",
                "username": "admin",
                "full name": "Administrator",
                "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
                "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
            },
            "id": 1,
            "name": "Sprint 2016-2-16",
            "slug": "sprint-2016-2-16",
            "estimated_start": "2016-02-16",
            "estimated_finish": "2016-03-02",
            "created_date": "2016-02-16T13:15:03+0000",
            "modified_date": "2016-04-11T13:15:03+0000",
            "closed": false,
            "disponibility": 0.0
        },
        "id": 139,
        "is_blocked": true,
        "blocked_note": "Blocked test message",
        "ref": 72,
        "is closed": false,
        "created_date": "2016-04-12T12:17:19+0000",
        "modified date": "2016-04-12T12:18:19+0000",
        "finish date": null,
        "subject": "test user story 5",
        "description": "this is a test description",
        "client requirement": false,
        "team_requirement": true,
        "generated from issue": null,
        "tribe_gig": null
    },
    "by": {
        "permalink": "http://localhost:9001/profile/user1",
        "username": "user1",
        "full_name": "Purificacion Montero",
        "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
        "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
    }
```

}

## 4.4. Task data information

### 4.4.1. Create

```
{
    "type": "task",
    "date": "2016-04-12T12:20:54.758Z",
    "action": "create",
    "data": {
        "custom attributes values": {},
        "watchers": [],
        "permalink": "http://localhost:9001/project/project-0/task/73",
        "tags": [
            "dolorem"
        ],
        "project": {
            "id": 1,
            "permalink": "http://localhost:9001/project/project-0",
            "name": "Project Example 0",
            "logo_big_url": null
        },
        "owner": {
            "id": 6,
            "permalink": "http://localhost:9001/profile/user1",
            "username": "user1",
            "full_name": "Purificacion Montero",
            "photo": "//media.taiga.io/avatar.80x80 g85 crop.png",
            "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
       },
        "assigned to": {
            "id": 10,
            "permalink": "http://localhost:9001/profile/user5",
            "username": "user5",
            "full_name": "Alicia Flores",
            "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
            "gravatar id": "464bb6d514c3ecece1b87136ceeda1da"
        },
        "status": {
            "id": 2,
            "name": "In progress",
            "slug": "in-progress",
            "color": "#ff9900",
            "is_closed": false
        },
        "user story": {
            "custom_attributes_values": {
                "eius vero facere": "repellat"
```

```
"watchers": [
   1
],
"permalink": "http://localhost:9001/project/project-0/us/6",
"tags": [
    "quam",
    "nulla"
],
"external_reference": null,
"project": {
    "id": 1,
    "permalink": "http://localhost:9001/project/project-0",
    "name": "Project Example 0",
    "logo_big_url": null
},
"owner": {
    "permalink": "http://localhost:9001/profile/user3",
    "username": "user3",
    "full_name": "Concepcion Garrido",
    "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
    "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
},
"assigned_to": {
    "id": 13,
    "permalink": "http://localhost:9001/profile/user8",
    "username": "user8",
    "full_name": "Lourdes Aguilar",
    "photo": "//media.taiga.io/avatar.80x80 g85 crop.png",
    "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
},
"points": [
   {
        "role": "UX",
        "name": "8",
        "value": 8.0
    },
    {
        "role": "Design",
        "name": "10",
        "value": 10.0
    },
    {
        "role": "Front",
        "name": "0",
        "value": 0.0
    },
    {
        "role": "Back",
        "name": "40",
```

```
"value": 40.0
                }
            ],
            "status": {
                "id": 4,
                "name": "Ready for test",
                "slug": "ready-for-test",
                "color": "#fcc000",
                "is closed": false,
                "is_archived": false
            },
            "milestone": {
                "permalink": "http://localhost:9001/project/project-
0/taskboard/sprint-2016-2-16",
                "project": {
                    "id": 1,
                    "permalink": "http://localhost:9001/project/project-0",
                    "name": "Project Example 0",
                    "logo_big_url": null
                },
                "owner": {
                    "id": 4,
                    "permalink": "http://localhost:9001/profile/admin",
                    "username": "admin",
                    "full_name": "Administrator",
                    "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
                    "gravatar id": "464bb6d514c3ecece1b87136ceeda1da"
                },
                "id": 1,
                "name": "Sprint 2016-2-16",
                "slug": "sprint-2016-2-16",
                "estimated_start": "2016-02-16",
                "estimated finish": "2016-03-02",
                "created_date": "2016-02-16T13:15:03+0000",
                "modified date": "2016-04-11T13:15:03+0000",
                "closed": false,
                "disponibility": 0.0
            },
            "id": 2,
            "is_blocked": false,
            "blocked note": "",
            "ref": 6,
            "is_closed": false,
            "created date": "2016-04-11T13:15:04+0000",
            "modified date": "2016-04-11T13:15:04+0000",
            "finish_date": null,
            "subject": "Implement the form",
            "description": "Voluptas odio a minus ipsam blanditiis rem,
blanditiis...",
            "client_requirement": false,
            "team_requirement": false,
```

```
"generated_from_issue": null,
            "tribe_gig": null
        },
        "milestone": {
            "permalink": "http://localhost:9001/project/project-0/taskboard/sprint-
2016-2-16",
            "project": {
                "id": 1,
                "permalink": "http://localhost:9001/project/project-0",
                "name": "Project Example 0",
                "logo_big_url": null
            },
            "owner": {
                "id": 4,
                "permalink": "http://localhost:9001/profile/admin",
                "username": "admin",
                "full_name": "Administrator",
                "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
                "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
            },
            "id": 1,
            "name": "Sprint 2016-2-16",
            "slug": "sprint-2016-2-16",
            "estimated_start": "2016-02-16",
            "estimated_finish": "2016-03-02",
            "created_date": "2016-02-16T13:15:03+0000",
            "modified date": "2016-04-11T13:15:03+0000",
            "closed": false,
            "disponibility": 0.0
        },
        "id": 163,
        "is blocked": true,
        "blocked_note": "blocked note message",
        "ref": 73,
        "created date": "2016-04-12T12:20:54+0000",
        "modified date": "2016-04-12T12:20:54+0000",
        "finished_date": null,
        "subject": "test task",
        "us order": 1,
        "taskboard_order": 1,
        "description": "Task description example",
        "is iocaine": true,
        "external_reference": null
    },
    "by": {
        "id": 6,
        "permalink": "http://localhost:9001/profile/user1",
        "username": "user1",
        "full_name": "Purificacion Montero",
        "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
        "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
```

```
}
```

### 4.4.2. Delete

```
{
    "data": {
        "custom_attributes_values": null,
        "watchers": [],
        "permalink": "http://localhost:9001/project/project-0/task/73",
        "tags": [
            "dolorem"
        ],
        "project": {
            "id": 1,
            "permalink": "http://localhost:9001/project/project-0",
            "name": "Project Example 0",
            "logo_big_url": null
        },
        "owner": {
            "permalink": "http://localhost:9001/profile/user1",
            "username": "user1",
            "full_name": "Purificacion Montero",
            "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
            "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
        },
        "assigned_to": {
            "id": 4,
            "permalink": "http://localhost:9001/profile/admin",
            "username": "admin",
            "full name": "Administrator",
            "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
"gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
        },
        "status": {
            "id": 2,
            "name": "In progress",
            "slug": "in-progress",
            "color": "#ff9900",
            "is closed": false
        },
        "user story": {
            "custom attributes values": {
                "eius vero facere": "repellat"
            },
            "watchers": [
            ],
            "permalink": "http://localhost:9001/project/project-0/us/6",
```

```
"tags": [
    "quam",
    "nulla"
"external_reference": null,
"project": {
    "id": 1,
    "permalink": "http://localhost:9001/project/project-0",
    "name": "Project Example 0",
    "logo_big_url": null
},
"owner": {
    "id": 8,
    "permalink": "http://localhost:9001/profile/user3",
    "username": "user3",
    "full_name": "Concepcion Garrido",
    "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
    "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
"assigned_to": {
    "id": 13,
    "permalink": "http://localhost:9001/profile/user8",
    "username": "user8",
    "full name": "Lourdes Aguilar",
    "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
    "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
},
"points": [
   {
        "role": "UX",
        "name": "8",
        "value": 8.0
    },
    {
        "role": "Design",
        "name": "10",
        "value": 10.0
    },
    {
        "role": "Front",
        "name": "0",
        "value": 0.0
    },
    {
        "role": "Back",
        "name": "40",
        "value": 40.0
    }
],
"status": {
    "id": 4,
```

```
"name": "Ready for test",
                "slug": "ready-for-test",
                "color": "#fcc000",
                "is_closed": false,
                "is_archived": false
            },
            "milestone": {
                "permalink": "http://localhost:9001/project/project-
0/taskboard/sprint-2016-2-16",
                "project": {
                    "id": 1,
                    "permalink": "http://localhost:9001/project/project-0",
                    "name": "Project Example 0",
                    "logo_big_url": null
                },
                "owner": {
                    "id": 4,
                    "permalink": "http://localhost:9001/profile/admin",
                    "username": "admin",
                    "full_name": "Administrator",
                    "photo": "//media.taiga.io/avatar.80x80 g85 crop.png",
                    "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
                },
                "id": 1,
                "name": "Sprint 2016-2-16",
                "slug": "sprint-2016-2-16",
                "estimated_start": "2016-02-16",
                "estimated_finish": "2016-03-02",
                "created_date": "2016-02-16T13:15:03+0000",
                "modified date": "2016-04-11T13:15:03+0000",
                "closed": false,
                "disponibility": 0.0
            },
            "id": 2,
            "is_blocked": false,
            "blocked note": "",
            "ref": 6,
            "is_closed": false,
            "created_date": "2016-04-11T13:15:04+0000",
            "modified_date": "2016-04-11T13:15:04+0000",
            "finish date": null,
            "subject": "Implement the form",
            "description": "Voluptas odio a minus ipsam blanditiis rem, blanditiis
corrupti odio expedita nihil consequuntur possimus segui, quia eos obcaecati hic
molestias quam similique ratione neque, ex eveniet hic ipsam minus animi cumque beatae
deserunt fugit eos, mollitia aut veritatis quisquam delectus ipsum ex in?",
            "client_requirement": false,
            "team_requirement": false,
            "generated_from_issue": null,
            "tribe_gig": null
        },
```

```
"milestone": {
            "permalink": "http://localhost:9001/project/project-0/taskboard/sprint-
2016-2-16",
            "project": {
                "id": 1,
                "permalink": "http://localhost:9001/project/project-0",
                "name": "Project Example 0",
                "logo_big_url": null
            },
            "owner": {
                "id": 4,
                "permalink": "http://localhost:9001/profile/admin",
                "username": "admin",
                "full_name": "Administrator",
                "photo": "//media.taiga.io/avatar.80x80 g85 crop.png",
"gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
            "id": 1,
            "name": "Sprint 2016-2-16",
            "slug": "sprint-2016-2-16",
            "estimated_start": "2016-02-16",
            "estimated_finish": "2016-03-02",
            "created_date": "2016-02-16T13:15:03+0000",
            "modified date": "2016-04-11T13:15:03+0000",
            "closed": false,
            "disponibility": 0.0
        },
        "id": 163,
        "is blocked": true,
        "blocked note": "blocked note message",
        "ref": 73,
        "created date": "2016-04-12T12:20:54+0000",
        "modified_date": "2016-04-12T12:21:40+0000",
        "finished_date": null,
        "subject": "test task",
        "us order": 1,
        "taskboard_order": 1,
        "description": "Task description example",
        "is iocaine": true,
        "external_reference": null
    },
    "type": "task",
    "action": "delete",
    "date": "2016-04-12T12:28:18.750Z",
    "by": {
        "id": 6,
        "permalink": "http://localhost:9001/profile/user1",
        "username": "user1",
        "full_name": "Purificacion Montero",
        "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
        "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
```

```
}
```

### **4.4.3. Change**

```
{
    "action": "change",
    "by": {
        "id": 6,
        "permalink": "http://localhost:9001/profile/user1",
        "username": "user1",
        "full_name": "Purificacion Montero",
        "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
        "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
    },
    "type": "task",
    "data": {
        "custom_attributes_values": {},
        "watchers": [],
        "permalink": "http://localhost:9001/project/project-0/task/73",
        "tags": [
            "dolorem"
        1,
        "project": {
            "id": 1,
            "permalink": "http://localhost:9001/project/project-0",
            "name": "Project Example 0",
            "logo_big_url": null
        },
        "owner": {
            "id": 6,
            "permalink": "http://localhost:9001/profile/user1",
            "username": "user1",
            "full_name": "Purificacion Montero",
            "photo": "//media.taiga.io/avatar.80x80 g85 crop.png",
            "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
        },
        "assigned to": {
            "id": 4,
            "permalink": "http://localhost:9001/profile/admin",
            "username": "admin",
            "full_name": "Administrator",
            "photo": "//media.taiga.io/avatar.80x80 g85 crop.png",
            "gravatar id": "464bb6d514c3ecece1b87136ceeda1da"
        },
        "status": {
            "id": 2,
            "name": "In progress",
            "slug": "in-progress",
            "color": "#ff9900",
```

```
"is closed": false
},
"user_story": {
    "custom_attributes_values": {
        "eius vero facere": "repellat"
    },
    "watchers": [
    1,
    "permalink": "http://localhost:9001/project/project-0/us/6",
    "tags": [
        "quam",
        "nulla"
    ],
    "external_reference": null,
    "project": {
        "id": 1,
        "permalink": "http://localhost:9001/project/project-0",
        "name": "Project Example 0",
        "logo_big_url": null
   },
    "owner": {
        "id": 8,
        "permalink": "http://localhost:9001/profile/user3",
        "username": "user3",
        "full_name": "Concepcion Garrido",
        "photo": "//media.taiga.io/avatar.80x80 g85 crop.png",
        "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
    },
    "assigned_to": {
        "id": 13,
        "permalink": "http://localhost:9001/profile/user8",
        "username": "user8",
        "full_name": "Lourdes Aguilar",
        "photo": "//media.taiga.io/avatar.80x80 g85 crop.png",
        "gravatar id": "464bb6d514c3ecece1b87136ceeda1da"
   },
    "points": [
        {
            "role": "UX",
            "name": "8",
            "value": 8.0
        },
        {
            "role": "Design",
            "name": "10",
            "value": 10.0
        },
        {
            "role": "Front",
            "name": "0",
```

```
"value": 0.0
                },
                {
                    "role": "Back",
                    "name": "40",
                    "value": 40.0
                }
            ],
            "status": {
                "id": 4,
                "name": "Ready for test",
                "slug": "ready-for-test",
                "color": "#fcc000",
                "is_closed": false,
                "is archived": false
            },
            "milestone": {
                "permalink": "http://localhost:9001/project/project-
0/taskboard/sprint-2016-2-16",
                "project": {
                    "id": 1,
                    "permalink": "http://localhost:9001/project/project-0",
                    "name": "Project Example 0",
                    "logo big url": null
                },
                "owner": {
                    "id": 4,
                    "permalink": "http://localhost:9001/profile/admin",
                    "username": "admin",
                    "full name": "Administrator",
                    "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
"gravatar id": "464bb6d514c3ecece1b87136ceeda1da"
                },
                "id": 1,
                "name": "Sprint 2016-2-16",
                "slug": "sprint-2016-2-16",
                "estimated_start": "2016-02-16",
                "estimated finish": "2016-03-02",
                "created date": "2016-02-16T13:15:03+0000",
                "modified_date": "2016-04-11T13:15:03+0000",
                "closed": false,
                "disponibility": 0.0
            },
            "id": 2,
            "is_blocked": false,
            "blocked_note": "",
            "ref": 6,
            "is_closed": false,
            "created_date": "2016-04-11T13:15:04+0000",
            "modified_date": "2016-04-11T13:15:04+0000",
            "finish_date": null,
```

```
"subject": "Implement the form",
            "description": "Voluptas odio a minus ipsam blanditiis rem,
blanditiis...",
            "client_requirement": false,
            "team_requirement": false,
            "generated from issue": null,
            "tribe_gig": null
        },
        "milestone": {
            "permalink": "http://localhost:9001/project/project-0/taskboard/sprint-
2016-2-16",
            "project": {
                "id": 1,
                "permalink": "http://localhost:9001/project/project-0",
                "name": "Project Example 0",
                "logo_big_url": null
            },
            "owner": {
                "id": 4,
                "permalink": "http://localhost:9001/profile/admin",
                "username": "admin",
                "full_name": "Administrator",
                "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
"gravatar id": "464bb6d514c3ecece1b87136ceeda1da"
            "id": 1,
            "name": "Sprint 2016-2-16",
            "slug": "sprint-2016-2-16",
            "estimated_start": "2016-02-16",
            "estimated_finish": "2016-03-02",
            "created_date": "2016-02-16T13:15:03+0000",
            "modified date": "2016-04-11T13:15:03+0000",
            "closed": false,
            "disponibility": 0.0
        },
        "id": 163,
        "is_blocked": true,
        "blocked_note": "blocked note message",
        "ref": 73,
        "created_date": "2016-04-12T12:20:54+0000",
        "modified date": "2016-04-12T12:21:40+0000",
        "finished_date": null,
        "subject": "test task",
        "us order": 1,
        "taskboard_order": 1,
        "description": "Task description example",
        "is iocaine": true,
        "external_reference": null
    },
    "date": "2016-04-12T12:21:40.603Z",
    "change": {
```

```
"diff": {
        "assigned_to": {
            "from": "Alicia Flores",
            "to": "Administrator"
        }
    },
    "comment": "",
    "comment_html": "",
    "delete_comment_date": null
    }
}
```

## 4.5. Issue data information

### 4.5.1. Create

```
{
    "data": {
        "custom_attributes_values": {},
        "watchers": [],
        "permalink": "http://localhost:9001/project/project-0/issue/75",
        "tags": [
            "officia",
            "delectus"
        ],
        "project": {
            "id": 1,
            "permalink": "http://localhost:9001/project/project-0",
            "name": "Project Example 0",
            "logo_big_url": null
       },
        "milestone": null,
        "owner": {
            "permalink": "http://localhost:9001/profile/user1",
            "username": "user1",
            "full_name": "Purificacion Montero",
            "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
            "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
        },
        "assigned to": null,
        "status": {
            "id": 1,
            "name": "New",
            "slug": "new",
            "color": "#8C2318",
            "is closed": false
        },
        "type": {
```

```
"id": 1,
            "name": "Bug",
            "color": "#89BAB4"
        },
        "priority": {
            "id": 1,
            "name": "Low",
            "color": "#666666"
        },
        "severity": {
            "id": 4,
            "name": "Important",
            "color": "#FFA500"
        },
        "id": 95,
        "is_blocked": false,
        "blocked_note": "",
        "ref": 75,
        "created_date": "2016-04-12T12:48:12+0000",
        "modified_date": "2016-04-12T12:48:12+0000",
        "finished_date": null,
        "subject": "Test issue 3",
        "description": "Test issue description",
        "external reference": null
    },
    "type": "issue",
    "action": "create",
    "date": "2016-04-12T12:48:13.089Z",
    "by": {
        "permalink": "http://localhost:9001/profile/user1",
        "username": "user1",
        "full name": "Purificacion Montero",
        "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
        "gravatar id": "464bb6d514c3ecece1b87136ceeda1da"
    }
}
```

### 4.5.2. Delete

```
"data": {
    "custom_attributes_values": null,
    "watchers": [],
    "permalink": "http://localhost:9001/project/project-0/issue/75",
    "tags": [
        "officia",
        "delectus"
    ],
    "project": {
```

```
"id": 1,
        "permalink": "http://localhost:9001/project/project-0",
        "name": "Project Example 0",
        "logo_big_url": null
    },
    "milestone": null,
    "owner": {
        "id": 6,
        "permalink": "http://localhost:9001/profile/user1",
        "username": "user1",
        "full_name": "Purificacion Montero",
        "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
        "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
    },
    "assigned to": null,
    "status": {
        "id": 3,
        "name": "Ready for test",
        "slug": "ready-for-test",
        "color": "#88A65E",
        "is closed": true
    "type": {
        "id": 1,
        "name": "Bug",
        "color": "#89BAB4"
    },
    "priority": {
        "id": 1,
        "name": "Low",
        "color": "#666666"
    },
    "severity": {
        "id": 4,
        "name": "Important",
        "color": "#FFA500"
    },
    "id": 95.
    "is_blocked": false,
    "blocked_note": "",
    "ref": 75,
    "created_date": "2016-04-12T12:48:12+0000",
    "modified_date": "2016-04-12T12:49:13+0000",
    "finished date": "2016-04-12T12:49:13+0000",
    "subject": "Test issue 3",
    "description": "Test issue description",
    "external reference": null
},
"type": "issue",
"action": "delete",
"date": "2016-04-12T12:50:23.488Z",
```

```
"by": {
    "id": 6,
    "permalink": "http://localhost:9001/profile/user1",
    "username": "user1",
    "full_name": "Purificacion Montero",
    "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
    "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
}
```

### **4.5.3. Change**

```
{
    "change": {
        "diff": {
            "status": {
                "to": "Ready for test",
                "from": "New"
            }
        },
        "comment": "",
        "comment_html": "",
        "delete comment date": null
   },
    "data": {
        "custom_attributes_values": {},
        "watchers": [],
        "permalink": "http://localhost:9001/project/project-0/issue/75",
        "tags": [
            "officia",
            "delectus"
        ],
        "project": {
            "id": 1,
            "permalink": "http://localhost:9001/project/project-0",
            "name": "Project Example 0",
            "logo_big_url": null
        },
        "milestone": null,
        "owner": {
            "id": 6,
            "permalink": "http://localhost:9001/profile/user1",
            "username": "user1",
            "full name": "Purificacion Montero",
            "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
            "gravatar id": "464bb6d514c3ecece1b87136ceeda1da"
        },
        "assigned_to": null,
        "status": {
            "id": 3,
```

```
"name": "Ready for test",
            "slug": "ready-for-test",
            "color": "#88A65E",
            "is_closed": true
        },
        "type": {
            "id": 1,
            "name": "Bug",
            "color": "#89BAB4"
        },
        "priority": {
            "id": 1,
            "name": "Low",
            "color": "#666666"
        },
        "severity": {
            "id": 4,
            "name": "Important",
            "color": "#FFA500"
        },
        "id": 95,
        "is_blocked": false,
        "blocked_note": "",
        "ref": 75,
        "created_date": "2016-04-12T12:48:12+0000",
        "modified_date": "2016-04-12T12:49:13+0000",
        "finished_date": "2016-04-12T12:49:13+0000",
        "subject": "Test issue 3",
        "description": "Test issue description",
        "external reference": null
    },
    "by": {
        "permalink": "http://localhost:9001/profile/user1",
        "username": "user1",
        "full name": "Purificacion Montero",
        "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
        "gravatar id": "464bb6d514c3ecece1b87136ceeda1da"
    "type": "issue",
    "action": "change",
    "date": "2016-04-12T12:49:13.188Z"
}
```

# 4.6. Wiki page data information

### 4.6.1. Create

```
{
    "data": {
        "permalink": "http://localhost:9001/project/project-0/wiki/test-wiki-page",
        "project": {
            "id": 1,
            "permalink": "http://localhost:9001/project/project-0",
            "name": "Project Example 0",
            "logo_big_url": null
        },
        "owner": {
            "permalink": "http://localhost:9001/profile/user1",
            "username": "user1",
            "full_name": "Purificacion Montero",
            "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
            "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
        },
        "last_modifier": {
            "id": 6,
            "permalink": "http://localhost:9001/profile/user1",
            "username": "user1",
            "full_name": "Purificacion Montero",
            "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
            "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
        },
        "id": 6,
        "slug": "test-wiki-page",
        "content": "this is a test content",
        "created date": "2016-04-12T12:29:32+0000",
        "modified_date": "2016-04-12T12:29:32+0000"
    },
    "type": "wikipage",
    "action": "create",
    "date": "2016-04-12T12:29:32.535Z",
    "by": {
        "id": 6,
        "permalink": "http://localhost:9001/profile/user1",
        "username": "user1",
        "full_name": "Purificacion Montero",
        "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
        "gravatar id": "464bb6d514c3ecece1b87136ceeda1da"
   }
}
```

### 4.6.2. Delete

```
{
    "data": {
        "permalink": "http://localhost:9001/project/project-0/wiki/test-wiki-page",
        "project": {
            "id": 1,
            "permalink": "http://localhost:9001/project/project-0",
            "name": "Project Example 0",
            "logo_big_url": null
        },
        "owner": {
            "permalink": "http://localhost:9001/profile/user1",
            "username": "user1",
            "full_name": "Purificacion Montero",
            "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
            "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
        },
        "last_modifier": {
            "id": 6,
            "permalink": "http://localhost:9001/profile/user1",
            "username": "user1",
            "full_name": "Purificacion Montero",
            "photo": "//media.taiga.io/avatar.80x80 g85 crop.png",
            "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
        },
        "id": 6,
        "slug": "test-wiki-page",
        "content": "This is other test content",
        "created date": "2016-04-12T12:29:32+0000",
        "modified_date": "2016-04-12T12:30:29+0000"
    },
    "type": "wikipage",
    "action": "delete",
    "date": "2016-04-12T12:31:19.281Z",
    "by": {
        "id": 6,
        "permalink": "http://localhost:9001/profile/user1",
        "username": "user1",
        "full_name": "Purificacion Montero",
        "photo": "//media.taiga.io/avatar.80x80_q85_crop.png",
        "gravatar id": "464bb6d514c3ecece1b87136ceeda1da"
   }
}
```

### 4.6.3. Change

```
{
    "change": {
        "diff": {
```

```
"content html": {
                "to": "This is other test content",
                "from": "this is a test content"
            "content diff": {
                "to": "<del style=\"background:#ffe6e6;\">t</del><ins
style=\"background:#e6ffe6;\">T</ins><span>his is </span><del
style=\"background:#ffe6e6;\">a</del><ins
style=\"background:#e6ffe6;\">other</ins><span> test content</span>",
                "from": null
        },
        "comment": "",
        "comment html": "",
        "delete comment date": null
   },
    "data": {
        "permalink": "http://localhost:9001/project/project-0/wiki/test-wiki-page",
        "project": {
            "id": 1,
            "permalink": "http://localhost:9001/project/project-0",
            "name": "Project Example 0",
            "logo_big_url": null
        },
        "owner": {
            "id": 6,
            "permalink": "http://localhost:9001/profile/user1",
            "username": "user1",
            "full_name": "Purificacion Montero",
            "photo": "//media.taiga.io/avatar.80x80 g85 crop.png",
            "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
        },
        "last modifier": {
            "id": 6,
            "permalink": "http://localhost:9001/profile/user1",
            "username": "user1",
            "full_name": "Purificacion Montero",
            "photo": "//media.taiga.io/avatar.80x80 g85 crop.png",
            "gravatar_id": "464bb6d514c3ecece1b87136ceeda1da"
       },
        "id": 6,
        "slug": "test-wiki-page",
        "content": "This is other test content",
        "created date": "2016-04-12T12:29:32+0000",
        "modified date": "2016-04-12T12:30:29+0000"
    },
    "by": {
        "id": 6,
        "permalink": "http://localhost:9001/profile/user1",
        "username": "user1",
        "full_name": "Purificacion Montero",
```