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. 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.

2. 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 sha1 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
  }
?>
```

3. 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.

3.1. Test payload

```
{
    "type": "test",
    "by": {
        "id": 6,
        "permalink": "http://localhost:9001/profile/user1",
        "qravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
        "username": "user1",
        "full_name": "Purificacion Montero",
        "photo": "//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
    },
    "date": "2016-04-12T12:00:56.335Z",
    "action": "test",
    "data": {
        "test": "test"
   }
}
```

3.2. Milestone payloads

3.2.1. Create

```
{
    "type": "milestone",
    "by": {
        "id": 6,
        "permalink": "http://localhost:9001/profile/user1",
        "gravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
        "username": "user1",
        "full name": "Purificacion Montero",
        "photo": "//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
    },
    "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",
            "gravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
            "username": "user1",
            "full_name": "Purificacion Montero",
            "photo":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
        },
        "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
   }
}
```

3.2.2. Delete

```
{
    "type": "milestone",
    "by": {
        "id": 6,
        "permalink": "http://localhost:9001/profile/user1",
        "gravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
        "username": "user1",
        "full name": "Purificacion Montero",
        "photo": "//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
   },
    "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": {
            "permalink": "http://localhost:9001/profile/user1",
            "gravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
            "username": "user1",
            "full_name": "Purificacion Montero",
            "photo":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
        },
        "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
   }
}
```

3.2.3. Change

```
{
    "type": "milestone",
    "by": {
        "id": 6,
```

```
"permalink": "http://localhost:9001/profile/user1",
        "gravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
        "username": "user1",
        "full_name": "Purificacion Montero",
        "photo": "//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
    },
    "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": {
            "permalink": "http://localhost:9001/profile/user1",
            "gravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
            "username": "user1",
            "full_name": "Purificacion Montero",
            "photo":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
        },
        "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
```

```
}
```

3.3. User story data information

3.3.1. 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": {
            "permalink": "http://localhost:9001/profile/user1",
            "gravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
            "username": "user1",
            "full_name": "Purificacion Montero",
            "photo":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
        },
        "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",
        "gravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
        "username": "user1",
        "full_name": "Purificacion Montero",
        "photo": "//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
   }
}
```

3.3.2. 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",
            "gravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
            "username": "user1",
            "full_name": "Purificacion Montero",
            "photo":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
        "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",
                "gravatar_url":
```

```
"//www.gravatar.com/avatar/64e1b8d34f425d19e1ee2ea7236d3028?size=80",
                "username": "admin",
                "full name": "Administrator",
                "photo":
"//www.gravatar.com/avatar/64e1b8d34f425d19e1ee2ea7236d3028?size=80"
            },
            "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",
        "gravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
        "username": "user1",
        "full name": "Purificacion Montero",
        "photo": "//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
   }
}
```

3.3.3. 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",
            "gravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
            "username": "user1",
            "full name": "Purificacion Montero",
            "photo":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
        },
        "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",
                "gravatar_url":
"//www.gravatar.com/avatar/64e1b8d34f425d19e1ee2ea7236d3028?size=80",
                "username": "admin",
                "full_name": "Administrator",
                "photo":
"//www.gravatar.com/avatar/64e1b8d34f425d19e1ee2ea7236d3028?size=80"
            "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
    },
    "bv": {
        "id": 6,
        "permalink": "http://localhost:9001/profile/user1",
        "gravatar url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
        "username": "user1",
        "full name": "Purificacion Montero",
        "photo": "//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
   }
}
```

3.4. Task data information

3.4.1. 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",
            "gravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
            "username": "user1",
            "full name": "Purificacion Montero",
            "photo":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
```

```
"assigned_to": {
            "id": 10,
            "permalink": "http://localhost:9001/profile/user5",
            "gravatar_url":
"//www.gravatar.com/avatar/c9ba9d485f9a9153ebf53758feb0980c?size=80",
            "username": "user5",
            "full_name": "Alicia Flores",
            "photo":
"//www.gravatar.com/avatar/c9ba9d485f9a9153ebf53758feb0980c?size=80"
        },
        "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",
                "gravatar url":
"//www.gravatar.com/avatar/9971a763f5dfc5cbd1ce1d2865b4fcfa?size=80",
                "username": "user3",
                "full name": "Concepcion Garrido",
                "photo":
"//www.gravatar.com/avatar/9971a763f5dfc5cbd1ce1d2865b4fcfa?size=80"
            },
            "assigned_to": {
                "id": 13,
                "permalink": "http://localhost:9001/profile/user8",
                "gravatar_url":
```

```
"//www.gravatar.com/avatar/dce0e8ed702cd85d5132e523121e619b?size=80",
                "username": "user8",
                "full_name": "Lourdes Aguilar",
                "photo":
"//www.gravatar.com/avatar/dce0e8ed702cd85d5132e523121e619b?size=80"
            },
            "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",
                    "gravatar_url":
"//www.gravatar.com/avatar/64e1b8d34f425d19e1ee2ea7236d3028?size=80",
                    "username": "admin",
```

```
"full_name": "Administrator",
                    "photo":
"//www.gravatar.com/avatar/64e1b8d34f425d19e1ee2ea7236d3028?size=80"
                "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",
                "gravatar_url":
"//www.gravatar.com/avatar/64e1b8d34f425d19e1ee2ea7236d3028?size=80",
                "username": "admin",
                "full_name": "Administrator",
                "photo":
"//www.gravatar.com/avatar/64e1b8d34f425d19e1ee2ea7236d3028?size=80"
            "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",
        "gravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
        "username": "user1",
        "full_name": "Purificacion Montero",
        "photo": "//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
   }
}
```

3.4.2. 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": {
```

```
"id": 6.
            "permalink": "http://localhost:9001/profile/user1",
            "gravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
            "username": "user1",
            "full name": "Purificacion Montero",
            "photo":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
        },
        "assigned_to": {
            "id": 4,
            "permalink": "http://localhost:9001/profile/admin",
            "gravatar_url":
"//www.gravatar.com/avatar/64e1b8d34f425d19e1ee2ea7236d3028?size=80",
            "username": "admin",
            "full_name": "Administrator",
            "photo":
"//www.gravatar.com/avatar/64e1b8d34f425d19e1ee2ea7236d3028?size=80"
        "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",
                "gravatar_url":
"//www.gravatar.com/avatar/9971a763f5dfc5cbd1ce1d2865b4fcfa?size=80",
                "username": "user3",
```

```
"full_name": "Concepcion Garrido",
                "photo":
"//www.gravatar.com/avatar/9971a763f5dfc5cbd1ce1d2865b4fcfa?size=80"
            "assigned_to": {
                "id": 13,
                "permalink": "http://localhost:9001/profile/user8",
                "gravatar_url":
"//www.gravatar.com/avatar/dce0e8ed702cd85d5132e523121e619b?size=80",
                "username": "user8",
                "full_name": "Lourdes Aguilar",
                "photo":
"//www.gravatar.com/avatar/dce0e8ed702cd85d5132e523121e619b?size=80"
            "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",
                    "gravatar url":
"//www.gravatar.com/avatar/64e1b8d34f425d19e1ee2ea7236d3028?size=80",
                    "username": "admin",
                    "full name": "Administrator",
                    "photo":
"//www.gravatar.com/avatar/64e1b8d34f425d19e1ee2ea7236d3028?size=80"
                "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": {
                "permalink": "http://localhost:9001/project/project-0",
                "name": "Project Example 0",
                "logo_big_url": null
            },
            "owner": {
                "id": 4,
```

```
"permalink": "http://localhost:9001/profile/admin",
                "gravatar_url":
"//www.gravatar.com/avatar/64e1b8d34f425d19e1ee2ea7236d3028?size=80",
                "username": "admin",
                "full_name": "Administrator",
                "photo":
"//www.gravatar.com/avatar/64e1b8d34f425d19e1ee2ea7236d3028?size=80"
            "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",
        "gravatar url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
        "username": "user1",
        "full_name": "Purificacion Montero",
        "photo": "//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
   }
}
```

3.4.3. Change

```
{
    "action": "change",
```

```
"by": {
        "id": 6,
        "permalink": "http://localhost:9001/profile/user1",
        "gravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
        "username": "user1",
        "full_name": "Purificacion Montero",
        "photo": "//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
    },
    "type": "task",
    "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",
            "gravatar url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
            "username": "user1",
            "full name": "Purificacion Montero",
            "photo":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
        },
        "assigned_to": {
            "id": 4,
            "permalink": "http://localhost:9001/profile/admin",
            "gravatar_url":
"//www.gravatar.com/avatar/64e1b8d34f425d19e1ee2ea7236d3028?size=80",
            "username": "admin",
            "full_name": "Administrator",
            "photo":
"//www.gravatar.com/avatar/64e1b8d34f425d19e1ee2ea7236d3028?size=80"
        },
        "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",
                "gravatar_url":
"//www.gravatar.com/avatar/9971a763f5dfc5cbd1ce1d2865b4fcfa?size=80",
                "username": "user3",
                "full_name": "Concepcion Garrido",
                "photo":
"//www.gravatar.com/avatar/9971a763f5dfc5cbd1ce1d2865b4fcfa?size=80"
            "assigned to": {
                "id": 13,
                "permalink": "http://localhost:9001/profile/user8",
                "gravatar_url":
"//www.gravatar.com/avatar/dce0e8ed702cd85d5132e523121e619b?size=80",
                "username": "user8",
                "full_name": "Lourdes Aquilar",
                "photo":
"//www.gravatar.com/avatar/dce0e8ed702cd85d5132e523121e619b?size=80"
            },
            "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",
                    "gravatar_url":
"//www.gravatar.com/avatar/64e1b8d34f425d19e1ee2ea7236d3028?size=80",
                    "username": "admin",
                    "full name": "Administrator",
                    "photo":
"//www.gravatar.com/avatar/64e1b8d34f425d19e1ee2ea7236d3028?size=80"
                "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",
                "gravatar url":
"//www.gravatar.com/avatar/64e1b8d34f425d19e1ee2ea7236d3028?size=80",
                "username": "admin",
                "full name": "Administrator",
                "photo":
"//www.gravatar.com/avatar/64e1b8d34f425d19e1ee2ea7236d3028?size=80"
            "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
   }
}
```

3.5. Issue data information

3.5.1. 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": {
            "id": 6,
            "permalink": "http://localhost:9001/profile/user1",
            "gravatar url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
            "username": "user1",
            "full name": "Purificacion Montero",
            "photo":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
        "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": {
        "id": 6,
        "permalink": "http://localhost:9001/profile/user1",
        "gravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
        "username": "user1",
        "full_name": "Purificacion Montero",
        "photo": "//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
   }
}
```

3.5.2. 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",
            "gravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
            "username": "user1",
            "full_name": "Purificacion Montero",
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
        "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",
        "gravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
        "username": "user1",
        "full name": "Purificacion Montero",
        "photo": "//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
   }
}
```

3.5.3. 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": {
            "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",
            "gravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
            "username": "user1",
            "full_name": "Purificacion Montero",
            "photo":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
        "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": {
        "id": 6,
        "permalink": "http://localhost:9001/profile/user1",
        "gravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
        "username": "user1",
        "full_name": "Purificacion Montero",
```

```
"photo": "//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
},
    "type": "issue",
    "action": "change",
    "date": "2016-04-12T12:49:13.188Z"
}
```

3.6. Wiki page data information

3.6.1. 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",
            "gravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
            "username": "user1",
            "full_name": "Purificacion Montero",
            "photo":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
        },
        "last modifier": {
            "id": 6,
            "permalink": "http://localhost:9001/profile/user1",
            "gravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
            "username": "user1",
            "full name": "Purificacion Montero",
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
        },
        "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",
        "gravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
        "username": "user1",
        "full_name": "Purificacion Montero",
        "photo": "//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
   }
}
```

3.6.2. **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",
            "gravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
            "username": "user1",
            "full_name": "Purificacion Montero",
            "photo":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
        },
        "last modifier": {
            "id": 6,
            "permalink": "http://localhost:9001/profile/user1",
            "gravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
            "username": "user1",
            "full name": "Purificacion Montero",
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
        },
        "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",
        "gravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
        "username": "user1",
        "full_name": "Purificacion Montero",
        "photo": "//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
   }
}
```

3.6.3. 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",
            "gravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
            "username": "user1",
            "full_name": "Purificacion Montero",
            "photo":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
        },
        "last modifier": {
            "id": 6,
            "permalink": "http://localhost:9001/profile/user1",
            "gravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
            "username": "user1",
            "full_name": "Purificacion Montero",
            "photo":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
        },
        "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",
        "gravatar_url":
"//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80",
        "username": "user1",
        "full_name": "Purificacion Montero",
        "photo": "//www.gravatar.com/avatar/aed1e43be0f69f07ce6f34a907bc6328?size=80"
    },
    "type": "wikipage",
    "action": "change",
    "date": "2016-04-12T12:30:29.870Z"
}
```