

Navigating through JSON properties

In ConfiForms you can set up fields that use JSON based web-services to load it's options

Sometimes JSON structures are logical and easy to use, sometimes they are not ([Accessing Insight object properties](#)), and sometimes it is something in-between

For example a recent deprecation and removal of a *createmeta* service in Jira 9 <https://confluence.atlassian.com/jiracore/jira-9-4-rest-api-change-log-1178876796.html#Jira9.4RESTAPIchangelog-9.0> and substitution it with new endpoints returning a "slightly" different structures

See <https://docs.atlassian.com/software/jira/docs/api/REST/9.7.1/#api/2/issue-getCreateIssueMetaProjectIssueTypes>

So, the structures returned by this service is something like this

```
{
  "maxResults": 50,
  "startAt": 0,
  "total": 15,
  "isLast": true,
  "values": [
    {
      "required": false,
      "schema": {
        "type": "user",
        "system": "assignee"
      },
      "name": "Assignee",
      "fieldId": "assignee",
      "autoCompleteUrl": "http://jira.vertuna.com:8080/rest/api/latest/user/assignable/search?issueKey=null&username=",
      "hasDefaultValue": false,
      "operations": [
        "set"
      ]
    },
    {
      "required": false,
      "schema": {
        "type": "array",
        "items": "attachment",
        "system": "attachment"
      },
      "name": "Attachment",
      "fieldId": "attachment",
      "hasDefaultValue": false,
      "operations": [
      ]
    },
    {
      "required": false,
      "schema": {
        "type": "array",
        "items": "component",
        "system": "components"
      },
      "name": "Component/s",
      "fieldId": "components",
      "hasDefaultValue": false,
      "operations": [
        "add",
        "set",
        "remove"
      ],
      "allowedValues": [
      ]
    }
  ],
  {
    "required": false,
    "schema": {
```

```

        "type": "any",
        "custom": "com.pyxis.greenhopper.jira:gh-epic-link",
        "customId": 10102
    },
    "name": "Epic Link",
    "fieldId": "customfield_10102",
    "hasDefaultValue": false,
    "operations": [
        "set"
    ]
},
{
    "required": false,
    "schema": {
        "type": "string",
        "system": "description"
    },
    "name": "Description",
    "fieldId": "description",
    "hasDefaultValue": false,
    "operations": [
        "set"
    ]
},
{
    "required": false,
    "schema": {
        "type": "date",
        "system": "duedate"
    },
    "name": "Due Date",
    "fieldId": "duedate",
    "hasDefaultValue": false,
    "operations": [
        "set"
    ]
},
{
    "required": false,
    "schema": {
        "type": "array",
        "items": "version",
        "system": "fixVersions"
    },
    "name": "Fix Version/s",
    "fieldId": "fixVersions",
    "hasDefaultValue": false,
    "operations": [
        "set",
        "add",
        "remove"
    ],
    "allowedValues": [

    ]
},
{
    "required": false,
    "schema": {
        "type": "array",
        "items": "issuelinks",
        "system": "issuelinks"
    },
    "name": "Linked Issues",
    "fieldId": "issuelinks",
    "autoCompleteUrl": "http://jira.vertuna.com:8080/rest/api/2/issue/picker?currentProjectId=&showSubTaskParent=true&showSubTasks=true&currentIssueKey=null&query=",
    "hasDefaultValue": false,
    "operations": [
        "add"
    ]
}

```

```

},
{
  "required": true,
  "schema": {
    "type": "issuetype",
    "system": "issuetype"
  },
  "name": "Issue Type",
  "fieldId": "issuetype",
  "hasDefaultValue": false,
  "operations": [

  ],
  "allowedValues": [
    {
      "self": "http://jira.vertuna.com:8080/rest/api/2/issuetype/10003",
      "id": "10003",
      "description": "A task that needs to be done.",
      "iconUrl": "http://jira.vertuna.com:8080/secure/viewavatar?
size=xsmall&avatarId=10318&avatarType=issuetype",
      "name": "Task",
      "subtask": false,
      "avatarId": 10318
    }
  ]
},
{
  "required": false,
  "schema": {
    "type": "array",
    "items": "string",
    "system": "labels"
  },
  "name": "Labels",
  "fieldId": "labels",
  "autoCompleteUrl": "http://jira.vertuna.com:8080/rest/api/1.0/labels/suggest?query=",
  "hasDefaultValue": false,
  "operations": [
    "add",
    "set",
    "remove"
  ]
},
{
  "required": false,
  "schema": {
    "type": "priority",
    "system": "priority"
  },
  "name": "Priority",
  "fieldId": "priority",
  "hasDefaultValue": true,
  "operations": [
    "set"
  ],
  "allowedValues": [
    {
      "self": "http://jira.vertuna.com:8080/rest/api/2/priority/1",
      "iconUrl": "http://jira.vertuna.com:8080/images/icons/priorities/highest.svg",
      "name": "Highest",
      "id": "1"
    },
    {
      "self": "http://jira.vertuna.com:8080/rest/api/2/priority/2",
      "iconUrl": "http://jira.vertuna.com:8080/images/icons/priorities/high.svg",
      "name": "High",
      "id": "2"
    },
    {
      "self": "http://jira.vertuna.com:8080/rest/api/2/priority/3",
      "iconUrl": "http://jira.vertuna.com:8080/images/icons/priorities/medium.svg",

```

```

        "name": "Medium",
        "id": "3"
    },
    {
        "self": "http://jira.vertuna.com:8080/rest/api/2/priority/4",
        "iconUrl": "http://jira.vertuna.com:8080/images/icons/priorities/low.svg",
        "name": "Low",
        "id": "4"
    },
    {
        "self": "http://jira.vertuna.com:8080/rest/api/2/priority/5",
        "iconUrl": "http://jira.vertuna.com:8080/images/icons/priorities/lowest.svg",
        "name": "Lowest",
        "id": "5"
    }
],
"defaultValue": {
    "self": "http://jira.vertuna.com:8080/rest/api/2/priority/3",
    "iconUrl": "http://jira.vertuna.com:8080/images/icons/priorities/medium.svg",
    "name": "Medium",
    "id": "3"
}
},
{
    "required": true,
    "schema": {
        "type": "project",
        "system": "project"
    },
    "name": "Project",
    "fieldId": "project",
    "hasDefaultValue": false,
    "operations": [
        "set"
    ],
    "allowedValues": [
        {
            "self": "http://jira.vertuna.com:8080/rest/api/2/project/10100",
            "id": "10100",
            "key": "TEST",
            "name": "TEST",
            "projectTypeKey": "software",
            "avatarUrls": {
                "48x48": "http://jira.vertuna.com:8080/secure/projectavatar?avatarId=10324",
                "24x24": "http://jira.vertuna.com:8080/secure/projectavatar?size=small&avatarId=10324",
                "16x16": "http://jira.vertuna.com:8080/secure/projectavatar?size=xsmall&avatarId=10324",
                "32x32": "http://jira.vertuna.com:8080/secure/projectavatar?size=medium&avatarId=10324"
            }
        }
    ]
},
{
    "required": true,
    "schema": {
        "type": "user",
        "system": "reporter"
    },
    "name": "Reporter",
    "fieldId": "reporter",
    "autoCompleteUrl": "http://jira.vertuna.com:8080/rest/api/latest/user/search?username=",
    "hasDefaultValue": false,
    "operations": [
        "set"
    ]
},
{
    "required": true,
    "schema": {
        "type": "string",
        "system": "summary"
    },

```

```

    "name": "Summary",
    "fieldId": "summary",
    "hasDefaultValue": false,
    "operations": [
      "set"
    ]
  },
  {
    "required": false,
    "schema": {
      "type": "timetracking",
      "system": "timetracking"
    },
    "name": "Time Tracking",
    "fieldId": "timetracking",
    "hasDefaultValue": false,
    "operations": [
      "set",
      "edit"
    ]
  }
]
}

```

It is now an array of "values", where each field is an independent object in the array

Now imagine we want to access the values of a "Priority" object and show them as dropdown options in ConfiForms web-service dropdown field

```

{
  "required": false,
  "schema": {
    "type": "priority",
    "system": "priority"
  },
  "name": "Priority",
  "fieldId": "priority",
  "hasDefaultValue": true,
  "operations": [
    "set"
  ],
  "allowedValues": [
    {
      "self": "http://jira.vertuna.com:8080/rest/api/2/priority/1",
      "iconUrl": "http://jira.vertuna.com:8080/images/icons/priorities/highest.svg",
      "name": "Highest",
      "id": "1"
    },
    {
      "self": "http://jira.vertuna.com:8080/rest/api/2/priority/2",
      "iconUrl": "http://jira.vertuna.com:8080/images/icons/priorities/high.svg",
      "name": "High",
      "id": "2"
    },
    {
      "self": "http://jira.vertuna.com:8080/rest/api/2/priority/3",
      "iconUrl": "http://jira.vertuna.com:8080/images/icons/priorities/medium.svg",
      "name": "Medium",
      "id": "3"
    },
    {
      "self": "http://jira.vertuna.com:8080/rest/api/2/priority/4",
      "iconUrl": "http://jira.vertuna.com:8080/images/icons/priorities/low.svg",
      "name": "Low",
      "id": "4"
    },
    {
      "self": "http://jira.vertuna.com:8080/rest/api/2/priority/5",
      "iconUrl": "http://jira.vertuna.com:8080/images/icons/priorities/lowest.svg",
      "name": "Lowest",
      "id": "5"
    }
  ],
  "defaultValue": {
    "self": "http://jira.vertuna.com:8080/rest/api/2/priority/3",
    "iconUrl": "http://jira.vertuna.com:8080/images/icons/priorities/medium.svg",
    "name": "Medium",
    "id": "3"
  }
}

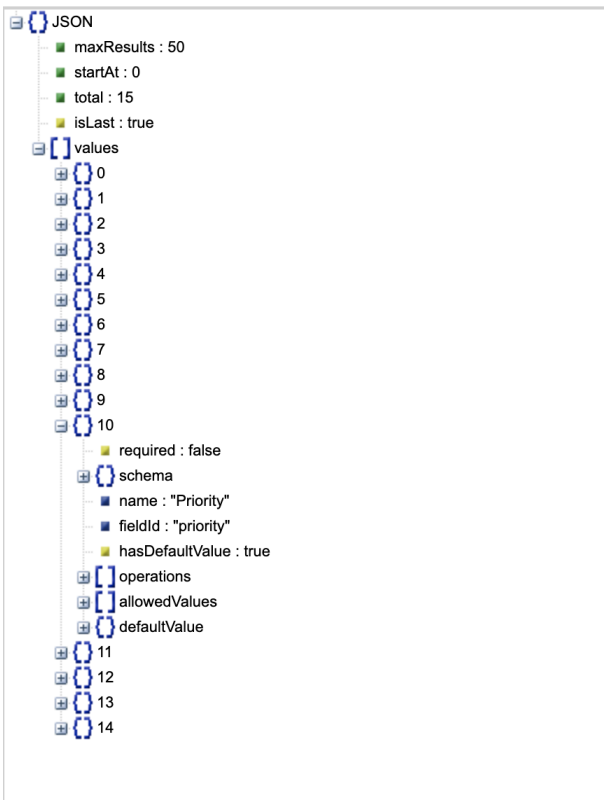
```

There are 2 ways to do that

- You can access the field's values by index in the array
- You can access it by field value match

Accessing by the field's values by index in the array

You can see the structure looks like this (we usually use <https://jsonviewer.stack.hu/> to visualize that) and the priority's field values are behind the element by index 10



So the "Root to use" in the web-service will look like

```
values[10].allowedValues
```

Accessing by the field value match

If accessing it by index does not look like "your thing" - there is another way. You can do it by property value match

Here is how

```
values.(fieldId=priority).allowedValues
```

So, it will access the "values" array and will look for objects/elements inside it matching their field "fieldId" against the given value (priority)

Just in case if you are curious on how the complete configuration for a web-service backed dropdown field looks like (backed by Jira 9 (and cloud) new *crea* *temeta* service - <https://docs.atlassian.com/software/jira/docs/api/REST/9.7.1/#api/2/issue-getCreateIssueMetaProjectIssueTypes>)

Root to use

When left empty, the complete JSON document will be taken as source using the mapping below

Field to use as "ID"

You can navigate using fields in a JSON tree, like: myfield.anotherfield. If 'Root to use' parameter is given, then you start your navigation from a given root. You can map multiple values by referencing them via [entry.field_name]

Field to use as "Label"

You can navigate through the JSON tree using fieldname.subfield.someotherfield to point at the specific value. You can map multiple values by referencing them via [entry.field_name]