

How to setup a webservice backed field in AssetForms



This tutorial is a little bit more advanced than others and expects you to be familiar with the following areas

- [How to create an asset type](#)
- [How to setup asset type fields](#)

In AssetForms we have a number of field types that can dramatically extend the possibilities of AssetForms and allow you to connect your other systems and datasources right into AssetForms fields

These fields are

- *Webservice checkbox*
- *Webservice checkbox group*
- *Webservice dropdown*
- *Webservice dropdown (advanced)*
- *Webservice multi-select*
- *Webservice radio group*

We will setup a dropdown field that uses data provided by our other app, [ConfiForms CLOUD](#)

We will setup a web service connection to [REST API for ConfiForms CLOUD](#) and show the data from ConfiForms inside the AssetForms field 😊

Let's start!

In ConfiForms app we have setup a form to store the data about our plugins

The form is pretty simple and contains 2 fields and just 6 records (yes, we do have 6 apps already on Atlassian Marketplace - [check them out!](#))

Fields are:

- name - text field
- available - multi-select field to select where the app is available: server, data center and/or cloud

Form: **apps** ▾

Form Admin UI - Records count: 6 - Fields count: 2

App name

Available for

Save

App name	Available for
AssetForms for Jira	Cloud
ConfiDoc - Viewer for SQL, XML, JSON, CSV	Server
ConfiForms. Data Forms & Workflows	Server Data Center Cloud
HTML include macro for Confluence cloud	Cloud
Smart ConfiTemplates	Server Data Center Cloud
SpaceAuditor - Statistics & Analytics	Server

Now, we need to setup a connection to ConfiForms via [REST API for ConfiForms CLOUD](#) and generate the access token as documentation says.

We will need this token to setup a connection in AssetForms. Click on "Configuration"



Then click on "Webservices connections" tab

Webservices connections

And add new connection

Webservice configuration

Name:

The name for your configuration, will be visible to users

Webservice URL:

This URL will be combined together with the service URL you setup. For web service backed fields in AssetForms your service must accept GET requests and return JSON as a result

Default request headers

In header:value format, use new line for each new header/value pair

Username:

Leave empty, if the connection requires **no authentication** and your service accepts anonymous requests.

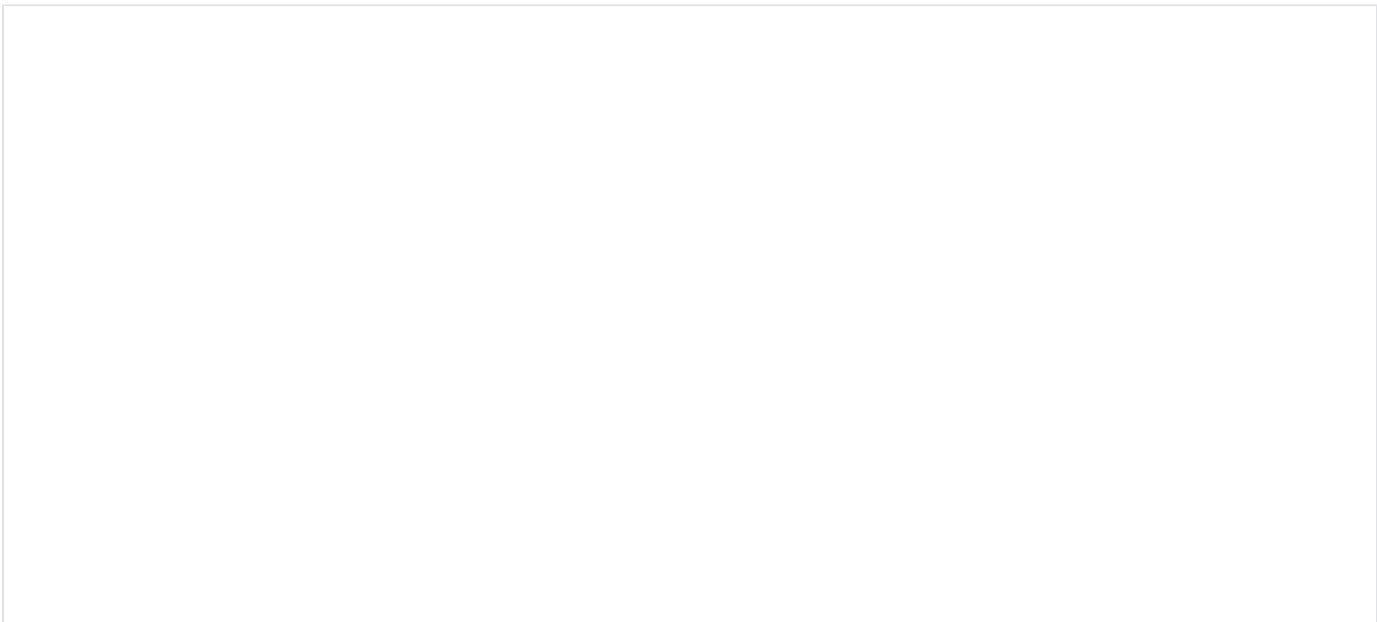
For setting up connections to Jira cloud please consider using API tokens, <https://id.atlassian.com/manage/api-tokens> (Generated token goes to password field and your email address goes to the username field)

Password:

We use ConfiForms "Search API" endpoint and it looks like this (our form is called "apps" and it is located on the page with id "167739393"). We use no filter/query to get all the rows from ConfiForms form

```
https://app.confiforms.net/rest/api/v1/search/<your_confiforms_app_access_token>/167739393/apps?q=
```

So the result of this API call is the list of apps we have on the marketplace and what installation it supports: cloud, server, data center



```
{
  "entries": [
    {
      "recordId": 1,
      "createdBy": "557058:49c2eeaf-b72c-4e4d-86a7-97c1a77b50b6",
      "created": 1587043364417,
      "id": "d80c6849-38b3-4a0a-b145-156f346dfaa5",
      "fields": {
        "name": "AssetForms for Jira",
        "available": "[\"cloud\"]"
      },
      "ownedBy": "557058:49c2eeaf-b72c-4e4d-86a7-97c1a77b50b6"
    },
    {
      "recordId": 2,
      "createdBy": "557058:49c2eeaf-b72c-4e4d-86a7-97c1a77b50b6",
      "created": 1587043382851,
      "id": "3495b0b3-0243-4ab0-a605-c6d14dd7d2df",
      "fields": {
        "name": "ConfiDoc. Viewer for SQL, XML, JSON, CSV",
        "available": "[\"server\"]"
      },
      "ownedBy": "557058:49c2eeaf-b72c-4e4d-86a7-97c1a77b50b6"
    },
    {
      "recordId": 3,
      "createdBy": "557058:49c2eeaf-b72c-4e4d-86a7-97c1a77b50b6",
      "created": 1587043402159,
      "id": "bd478f2a-a6bb-483d-884a-6188e1b32347",
      "fields": {
        "name": "ConfiForms. Data Forms & Workflows",
        "available": "[\"cloud\", \"dc\", \"server\"]"
      },
      "ownedBy": "557058:49c2eeaf-b72c-4e4d-86a7-97c1a77b50b6"
    },
    {
      "recordId": 4,
      "createdBy": "557058:49c2eeaf-b72c-4e4d-86a7-97c1a77b50b6",
      "created": 1587043420548,
      "id": "1efb8972-3047-4081-a389-6c1715707427",
      "fields": {
        "name": "HTML include macro for Confluence cloud",
        "available": "[\"cloud\"]"
      },
      "ownedBy": "557058:49c2eeaf-b72c-4e4d-86a7-97c1a77b50b6"
    },
    {
      "recordId": 5,
      "createdBy": "557058:49c2eeaf-b72c-4e4d-86a7-97c1a77b50b6",
      "created": 1587043431850,
      "id": "766096bd-1b4f-4288-a792-41a872230417",
      "fields": {
        "name": "Smart ConfiTemplates",
        "available": "[\"cloud\", \"dc\", \"server\"]"
      },
      "ownedBy": "557058:49c2eeaf-b72c-4e4d-86a7-97c1a77b50b6"
    },
    {
      "recordId": 6,
      "createdBy": "557058:49c2eeaf-b72c-4e4d-86a7-97c1a77b50b6",
      "created": 1587043451356,
      "id": "12eblce8-0a77-4f1c-877d-46cf7f4d3b18",
      "fields": {
        "name": "SpaceAuditor - Statistics & Analytics",
        "available": "[\"server\"]"
      },
      "ownedBy": "557058:49c2eeaf-b72c-4e4d-86a7-97c1a77b50b6"
    }
  ]
}
```

When we are done with connection configuration we can start with setting up the asset type with a web-service field

We have created the following asset type

Asset type

Name*

Name of the asset type

Key*

Asset type key. Must be unique across all asset types and is allowed to contain only letters. This value cannot be changed after it has been created

Description

Description for your asset type (max 250 characters)

Fields

You can re-arrange fields order by using drag & drop

☰

Summary*

☰

Only cloud

☰

App*

☰

More details

Field types Add Field

It has 4 fields as you can see and our "App" field is actually not a simple dropdown, but the one that is using the data from ConfiForms REST API and is configured as follows

App*

Field properties

Field type: Webservice dropdown

Field name*
Name of the field to be used when writing conditions / filters

Field label*
Label is shown next the the field control

Is required
When the field is set as required, the field's label will have the "*" sign added and the form will not accept empty values for this field

Field description
Description is an explanatory text shown under the field

CSS styles
CSS styles to apply on field

Webservice field configuration

Connected to web service:

Service url

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. And when 'Root to use' is given, then you start your navigation from a given root.

Field to use as "Label":
Sames, as with ID field. You can navigate through the JSON tree using fieldname.subfield.someotherfield to point at the specific value

We have selected it to be a "webservice dropdown" and have set up some mappings to get right fields into right places, see the result JSON file returned by ConfiForms API. We take the "entries" as a root element and we put "id" field's value from ConfiForms into the dropdown ID property and we take "fields.name" as a label

And that is it. The data managed in ConfiForms, but is used in AssetForms! 😊

Then... we have extended our asset type as bit with Asset types rules and "Apply Filter" rule in particular to filter out from the choices those apps that are not available in cloud

Here is how we configured those rules

Rules

Rules define behavior of the asset type form

Rule	Bound to field	Condition (when)	Action / Fields
apply-filter	Leaving it empty will execute the rule on load <input type="text" value="onlyCloud"/> <input type="button" value="x"/>	Leaving it empty will always execute this rule <input type="text"/>	Field to apply the filter on: <input type="text" value="app"/> Filter to apply on a field: <input type="text"/>
apply-filter	Leaving it empty will execute the rule on load <input type="text" value="onlyCloud"/> <input type="button" value="x"/>	Leaving it empty will always execute this rule <input type="text" value="onlyCloud:true"/>	Field to apply the filter on: <input type="text" value="app"/> Filter to apply on a field: <input type="text" value="fields.available:*cloud*"/>

Rules

And the final asset type looks like this

Asset

Asset type: SUPPORT - Support tickets ^ v

Summary*

Only cloud

App*

More details

- AssetForms for Jira
- ConfiForms. Data Forms & Workflows
- HTML include macro for Confluence cloud
- Smart ConfiTemplates

That's it! Now you know the basics how to connect and configure external web services to be the sources for your AssetForms fields and how to map the data into the field.

As well, as how to filter data.