Using ConfiForms app as template engine to create pages in Confluence

In this tutorial:

- how to create a form which will create new pages in Confluence based on the template
- how to set labels to newly created pages (also dynamic labels)
- our pages will have a status field which will show the status of the content on this page (we will have 3 statuses: draft, completed, approved)
- our form will have a link to all created pages
- use formula to have a LastUpdated date field stored for us automatically

If you are new to ConfiForms, please take a few minutes to read the Basic concepts Guide, or go through the video tutorial on that page. 🙂

- Creating Confluence pages with ConfiForms
- Why ConfiForms creates a broken page from Confluence template
- Why ConfiForms "auto-wraps" everything with ConfiForms ListView on a created page

Creating Confluence pages with ConfiForms

ConfiForms plugin is very versatile in functionality. And one of it's features is to help you with creation of dynamic page templates.

It is not a secret that you can create Confluence pages based on the data entered in ConfiForms, there is a good tutorial about that - Easy employee checklists in Confluence with ConfiForms

This tutorial is focusing on same feature, but from a bit different angle.

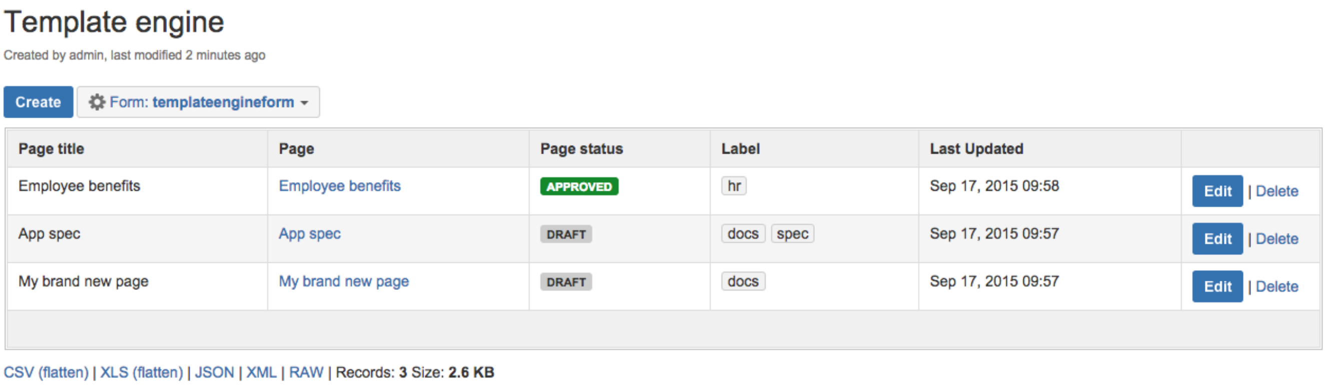
We will create pages which are labeled and have a status field, showing the status of the content on this page.

As usual, let's start with a form definition.

We will create a ConfiForms form with 5 fields

- text field to capture the page title
- raw HTML field to store the link to created page (Hidden HTML field type)
- status field with 3 statuses for page content: draft, completed, approved)
- a field to choose which label should be applied on the page create (a multiselect dropdown field)
- and a formula field to calculate last updated time for us

Here is how the form looks like in the admin view



Template engine

Created by admin, last modified 2 minutes ago

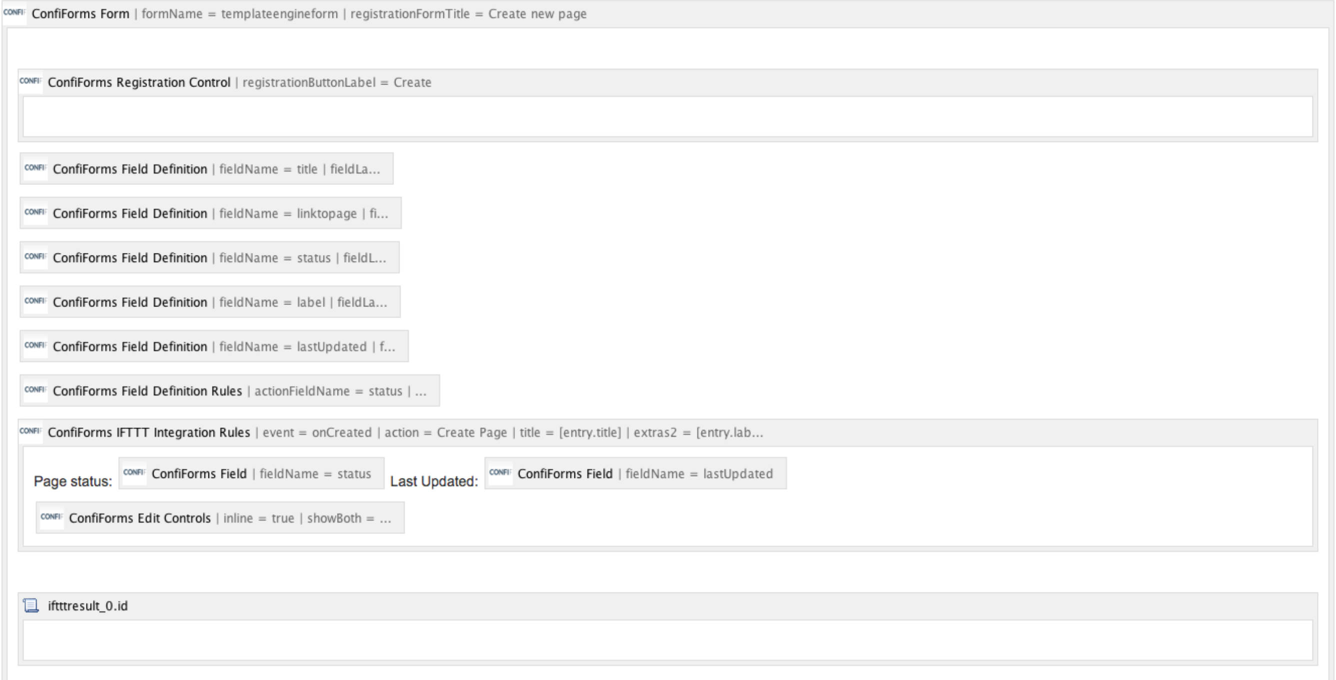
Page title	Page	Page status	Label	Last Updated	
Employee benefits	Employee benefits	APPROVED	hr	Sep 17, 2015 09:58	Edit | Delete
App spec	App spec	DRAFT	docs spec	Sep 17, 2015 09:57	Edit | Delete
My brand new page	My brand new page	DRAFT	docs	Sep 17, 2015 09:57	Edit | Delete

CSV (flatten) | XLS (flatten) | JSON | XML | RAW | Records: **3** Size: **2.6 KB**

Two ConfiForms IFTTT macros configured:

- to create a page when new ConfiForms record is created, taking page title from a text field, adding labels to the page
- to update the ConfiForms record when the page is created with link to this page

Here is how the configuration looks like in Confluence editor



ConfiForms Form | formName = templateengineform | registrationFormTitle = Create new page

ConfiForms Registration Control | registrationButtonLabel = Create

ConfiForms Field Definition | fieldName = title | fieldLa...

ConfiForms Field Definition | fieldName = linktopage | fi...

ConfiForms Field Definition | fieldName = status | fieldL...

ConfiForms Field Definition | fieldName = label | fieldLa...

ConfiForms Field Definition | fieldName = lastUpdated | f...

ConfiForms Field Definition Rules | actionFieldName = status | ...

ConfiForms IFTTT Integration Rules | event = onCreated | action = Create Page | title = [entry.title] | extras2 = [entry.lab...

Page status: ConfiForms Field | fieldName = status Last Updated: ConfiForms Field | fieldName = lastUpdated

ConfiForms Edit Controls | inline = true | showBoth = ...

iftttresult_0.id

See also, Advanced integrations with IFTTT macros with ConfiForms and Using Confluence templates with ConfiForms and avoid configuration duplication on hints how to mix and use IFTTT with Confluence templates

Here is the complete storage format for the page if you want to import the solution right into your Confluence page (You will need Confluence Source editor, a free plugin from Atlassian to work with raw storage format)

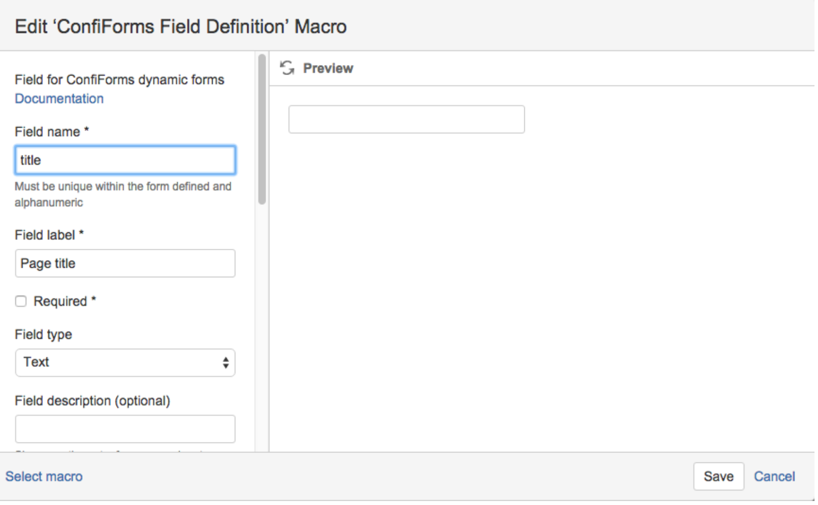
```
<ac:structured-macro ac:macro-id="1b09adaf-ef48-4635-912e-a60b2f7f3e5a" ac:name="confiform" ac:schema-version="
1">
  <ac:parameter ac:name="formName">templateengineform</ac:parameter>
  <ac:parameter ac:name="registrationFormTitle">Create new page</ac:parameter>
  <ac:rich-text-body>
    <p>
      <ac:structured-macro ac:macro-id="e80ac6ff-7773-4f53-99e5-4305941266b3" ac:name="confiform-entry-
register" ac:schema-version="1">
        <ac:parameter ac:name="registrationButtonLabel">Create</ac:parameter>
        <ac:parameter ac:name="atlassian-macro-output-type">INLINE</ac:parameter>
        <ac:rich-text-body>
          <p> </p>
        </ac:rich-text-body>
      </ac:structured-macro>
      <ac:structured-macro ac:macro-id="ec0cef2d-ab06-4947-ab5e-dc8d4898439a" ac:name="confiform-field-
definition" ac:schema-version="1">
        <ac:parameter ac:name="fieldName">title</ac:parameter>
        <ac:parameter ac:name="fieldLabel">Page title</ac:parameter>
        <ac:parameter ac:name="type">text</ac:parameter>
      </ac:structured-macro>
    </p>
    <p>
      <ac:structured-macro ac:macro-id="f723479f-fb4c-45d4-99a8-06a143752599" ac:name="confiform-field-
definition" ac:schema-version="1">
        <ac:parameter ac:name="fieldName">linktopage</ac:parameter>
        <ac:parameter ac:name="fieldLabel">Page</ac:parameter>
        <ac:parameter ac:name="type">hiddenhtml</ac:parameter>
      </ac:structured-macro>
    </p>
    <p>
```

```
      <ac:structured-macro ac:macro-id="a96c7f02-cadc-4db3-8fb7-b89b83e022e1" ac:name="confiform-field-definition" ac:schema-version="1">
        <ac:parameter ac:name="fieldName">status</ac:parameter>
        <ac:parameter ac:name="fieldLabel">Page status</ac:parameter>
        <ac:parameter ac:name="values">false[default=draft|current=completed|success=approved|]</ac:parameter>
        <ac:parameter ac:name="type">status</ac:parameter>
      </ac:structured-macro>
    </p>
    <p>
      <ac:structured-macro ac:macro-id="62a1af2e-aede-4135-9c6d-20f7ec6655ca" ac:name="confiform-field-definition" ac:schema-version="1">
        <ac:parameter ac:name="fieldName">label</ac:parameter>
        <ac:parameter ac:name="fieldLabel">Label</ac:parameter>
        <ac:parameter ac:name="values">false[docs=docs|spec=spec|hr=hr|]</ac:parameter>
        <ac:parameter ac:name="type">multi</ac:parameter>
        <ac:parameter ac:name="separator">,</ac:parameter>
      </ac:structured-macro>
    </p>
    <p>
      <ac:structured-macro ac:macro-id="8bc3908a-3246-4863-bf2d-41a5a13c3f05" ac:name="confiform-field-definition" ac:schema-version="1">
        <ac:parameter ac:name="fieldName">lastUpdated</ac:parameter>
        <ac:parameter ac:name="fieldLabel">Last Updated</ac:parameter>
        <ac:parameter ac:name="extras">FORMATDATETIME(NOW())</ac:parameter>
        <ac:parameter ac:name="type">formula</ac:parameter>
      </ac:structured-macro>
    </p>
    <p>
      <ac:structured-macro ac:macro-id="38069eb9-4931-4569-b50c-ed0499f096e0" ac:name="confiform-field-definition-rules" ac:schema-version="1">
        <ac:parameter ac:name="values">status=default</ac:parameter>
        <ac:parameter ac:name="action">Set value if empty</ac:parameter>
        <ac:parameter ac:name="actionFieldName">status</ac:parameter>
      </ac:structured-macro>
    </p>
    <ac:structured-macro ac:macro-id="e05996b4-65b3-422e-999e-c25c46a8f25f" ac:name="confiform-ifttt" ac:schema-version="1">
      <ac:parameter ac:name="action">Create Page</ac:parameter>
      <ac:parameter ac:name="event">onCreated</ac:parameter>
      <ac:parameter ac:name="title">[entry.title]</ac:parameter>
      <ac:parameter ac:name="extras2">[entry.label]</ac:parameter>
      <ac:rich-text-body>
        <p>Page status: <ac:structured-macro ac:macro-id="662a6841-0c6c-48a1-a62a-affafc4a2512" ac:name="confiform-field" ac:schema-version="1">
            <ac:parameter ac:name="fieldName">status</ac:parameter>
          </ac:structured-macro> Last Updated: <span style="color: rgb(153,153,153);">
            <ac:structured-macro ac:macro-id="e0aebaa9-0d19-42ad-b3a9-22a36e777c89" ac:name="confiform-field" ac:schema-version="1">
              <ac:parameter ac:name="fieldName">lastUpdated</ac:parameter>
            </ac:structured-macro>
          </span>
        </p>
        <p>
          <ac:structured-macro ac:macro-id="3dfe2568-e61f-4d8b-80c7-2181b06859eb" ac:name="confiform-entry-edit" ac:schema-version="1">
            <ac:parameter ac:name="inline">true</ac:parameter>
            <ac:parameter ac:name="showBoth">false</ac:parameter>
          </ac:structured-macro>
        </p>
        <p> </p>
      </ac:rich-text-body>
    </ac:structured-macro>
    <ac:structured-macro ac:macro-id="e58f83c4-99eb-4642-ab80-90176ba8104a" ac:name="confiform-ifttt" ac:schema-version="1">
      <ac:parameter ac:name="action">Create ConfiForms Entry</ac:parameter>
      <ac:parameter ac:name="event">onCreated</ac:parameter>
      <ac:parameter ac:name="title">entryId=[entry.id]&amp;linktopage=&lt;a href="http://localhost:1990/confluence/pages/viewpage.action?pageId=${iftttResult_0.id}"&gt;[entry.title]&lt;/a&gt;</ac:parameter>
      <ac:parameter ac:name="who">templateengineform:2588674</ac:parameter>
      <ac:rich-text-body>
        <p> </p>
      </ac:rich-text-body>
    </ac:structured-macro>
  </ac:rich-text-body>
</ac:structured-macro>
```

So, let's walk through each macro on the page

- The ConfiForms Form is used as a container as alway, and in our case here uses standard settings. We have only set the form title to be "Create new page" and named our form as "**templateengineform**"
- Next is ConfiForms Registration Control, to enable "Register/Add New" button. We place it inside the form container and have it with default settings, but as usual you can set permissions who can use this button, restrict it to be visible for certain groups or users
- Next 5 macros are the field definitions

1. Text field to store the page title and use it as the name for the page to create



Edit 'ConfiForms Field Definition' Macro

Field for ConfiForms dynamic forms
Documentation

Field name *
title
Must be unique within the form defined and alphanumeric

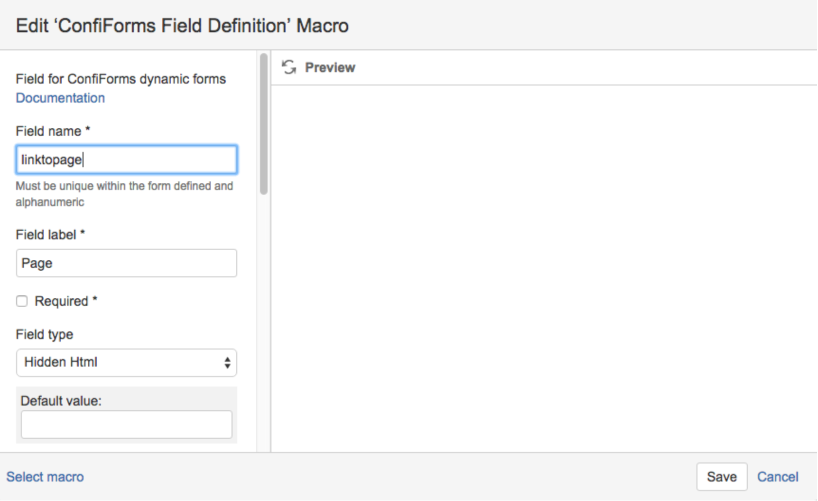
Field label *
Page title

□ Required *

Field type
Text

Field description (optional)

2. Hidden HTML field which is not shown on the dialog, but needed for us to store the link to created page



Edit 'ConfiForms Field Definition' Macro

Field for ConfiForms dynamic forms
Documentation

Field name *
linktopage
Must be unique within the form defined and alphanumeric

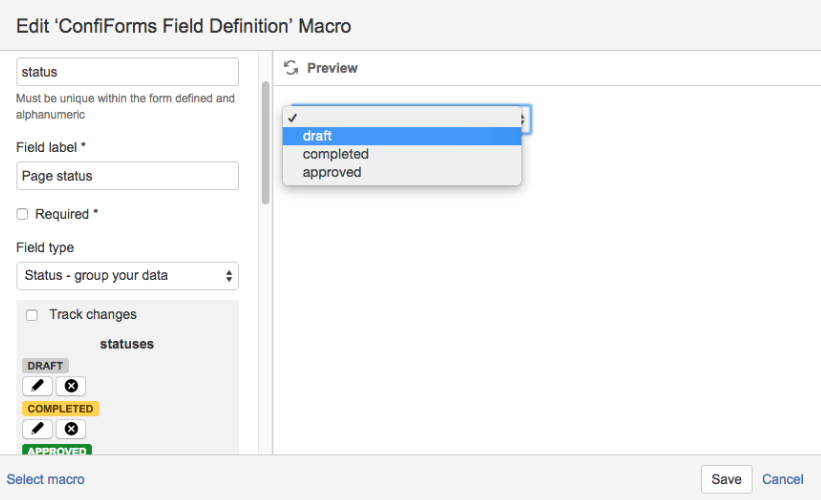
Field label *
Page

□ Required *

Field type
Hidden Html

Default value:

3. Field to set status on the page - so users know exactly what content they are reading: is it draft, approved and final or just a completed, but not yet approved document



Edit 'ConfiForms Field Definition' Macro

status

Must be unique within the form defined and alphanumeric

Field label * Page status

□ Required *

Field type: Status - group your data

□ Track changes

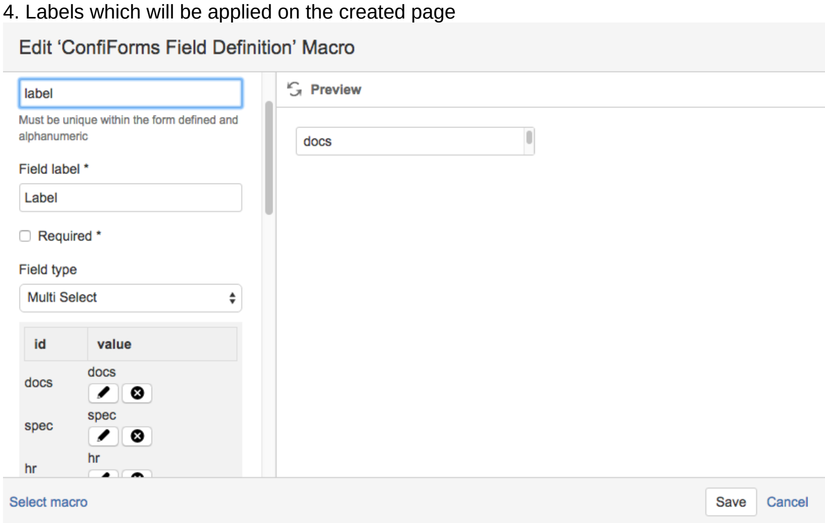
statuses

DRAFT

COMPLETED

APPROVED

4. Labels which will be applied on the created page



Edit 'ConfiForms Field Definition' Macro

label

Must be unique within the form defined and alphanumeric

Field label * Label

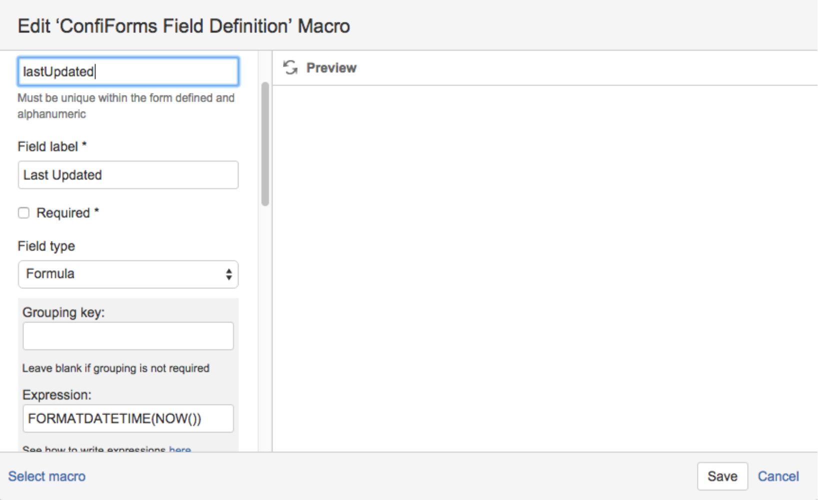
□ Required *

Field type: Multi Select

id	value
docs	docs
spec	spec
hr	hr

please note that we also set **separator** parameter to be ",". This is needed to enable correct handling of labels - otherwise when multiple labels are selected they are set as one Confluence label, not as multiple

5. Formula field to keep the information about when the record has been last time updated



Edit 'ConfiForms Field Definition' Macro

lastUpdated

Must be unique within the form defined and alphanumeric

Field label * Last Updated

□ Required *

Field type: Formula

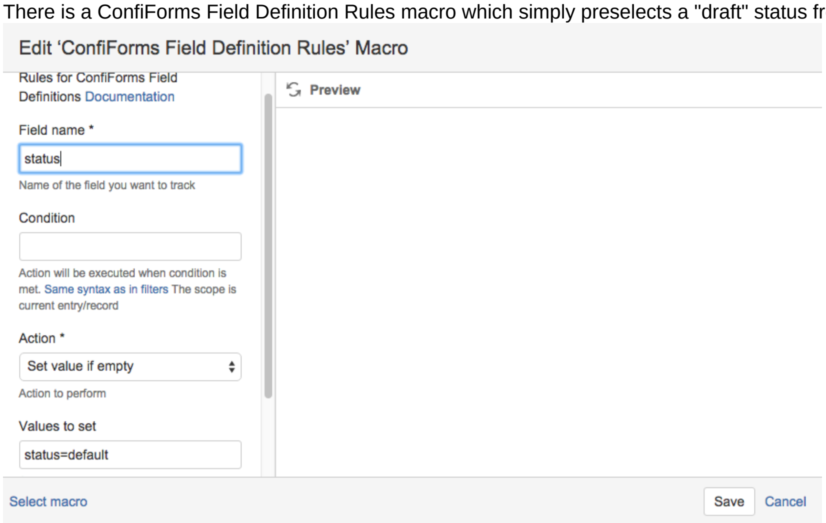
Grouping key:

Leave blank if grouping is not required

Expression: FORMATDATETIME(NOW())

See how to write expressions here

- There is a ConfiForms Field Definition Rules macro which simply preselects a "draft" status fro you when a dialog to create new page is shown



Edit 'ConfiForms Field Definition Rules' Macro

Rules for ConfiForms Field Definitions Documentation

Field name *

status

Name of the field you want to track

Condition

Action will be executed when condition is met. Same syntax as in filters The scope is current entry/record

Action *

Set value if empty

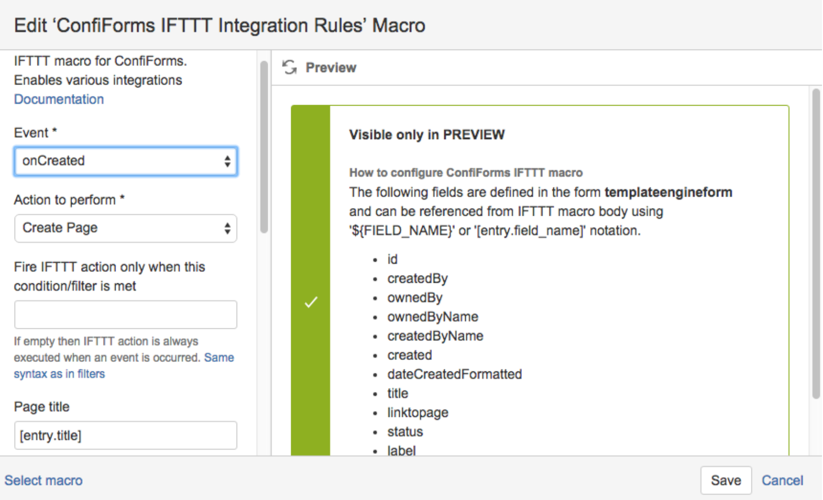
Action to perform

Values to set

status=default

a small trick here is that it sets a status value to "default", as this is the colour selected to show a draft status. Check the Documentation for Status field type to see the colours and corresponding values

- Then there is an IFTTT macro to create a page



Edit 'ConfiForms IFTTT Integration Rules' Macro

IFTTT macro for ConfiForms. Enables various integrations Documentation

Event *

onCreated

Action to perform *

Create Page

Fire IFTTT action only when this condition/filter is met

If empty then IFTTT action is always executed when an event is occurred. Same syntax as in filters

Page title

[entry.title]

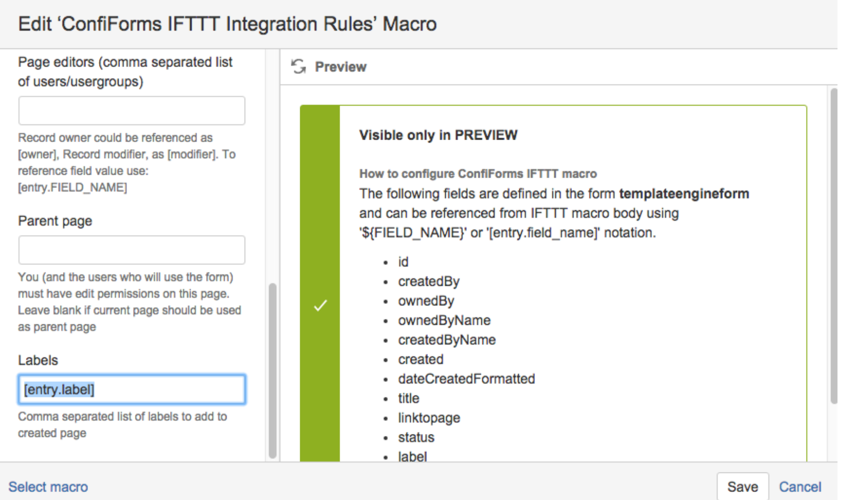
Visible only in PREVIEW

How to configure ConfiForms IFTTT macro

The following fields are defined in the form **templateengineform** and can be referenced from IFTTT macro body using '${FIELD_NAME}' or '[entry.field_name]' notation.

- id
- createdBy
- ownedBy
- ownedByName
- createdByName
- created
- dateCreatedFormatted
- title
- linktopage
- status
- label

we set page title to be dynamic and based on the value entered on the form, in the field "title"



Edit 'ConfiForms IFTTT Integration Rules' Macro

Page editors (comma separated list of users/usergroups)

Record owner could be referenced as [owner], Record modifier, as [modifier]. To reference field value use: [entry.FIELD_NAME]

Parent page

You (and the users who will use the form) must have edit permissions on this page. Leave blank if current page should be used as parent page

Labels

[entry.label]

Comma separated list of labels to add to created page

Visible only in PREVIEW

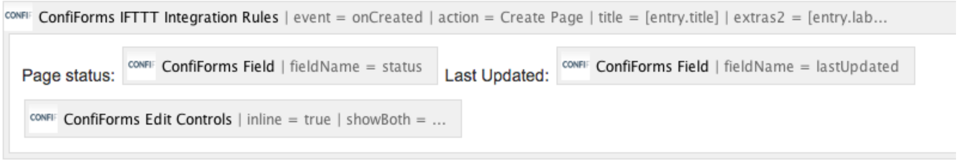
How to configure ConfiForms IFTTT macro

The following fields are defined in the form **templateengineform** and can be referenced from IFTTT macro body using '${FIELD_NAME}' or '[entry.field_name]' notation.

- id
- createdBy
- ownedBy
- ownedByName
- createdByName
- created
- dateCreatedFormatted
- title
- linktopage
- status
- label

and we also set labels to be dynamic as well (Label field definition has a value separator set to "," , so the labels param get's given as a comma separated list)

The layout we have for the new pages is very simple (for demonstration)

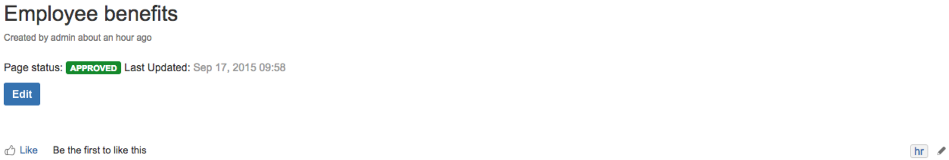


ConfiForms IFTTT Integration Rules | event = onCreated | action = Create Page | title = [entry.title] | extras2 = [entry.lab...

Page status: ConfiForms Field | fieldName = status Last Updated: ConfiForms Field | fieldName = lastUpdated

ConfiForms Edit Controls | inline = true | showBoth = ...

When page is created it looks something like this:

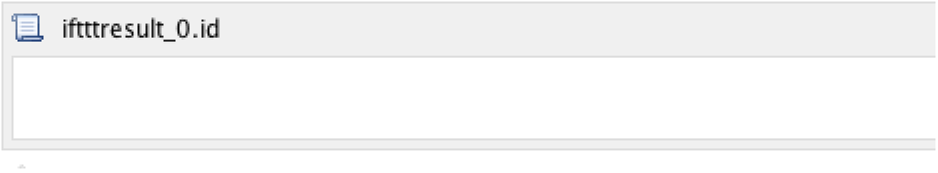


Employee benefits

Created by admin about an hour ago

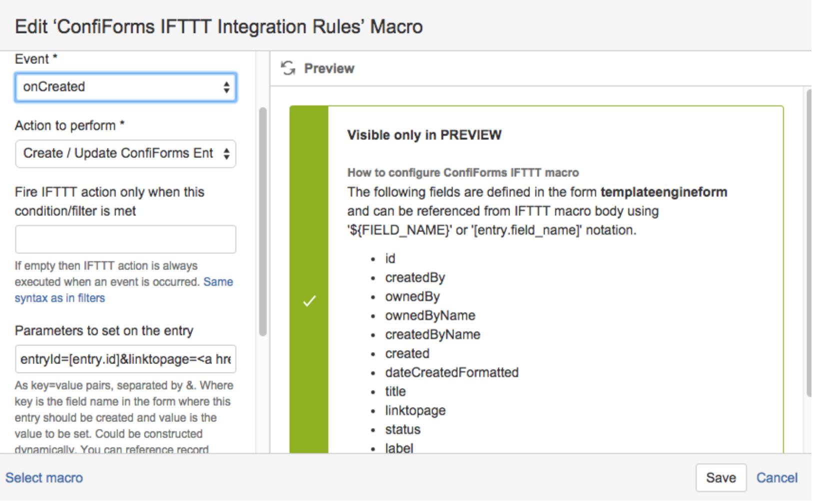
Page status: APPROVED Last Updated: Sep 17, 2015 09:58

- OK, and the last bit is the ConfiForms IFTTT macro as well, which looks in the Confluence editor like this, because of the ${} construction used in macro parameters



Actually it is the same IFTTT macro as the fisrt one, but does a little bit different thing: it updates the original ConfiForms record and uses the result of a previous IFTTT macro execution (which is a created page, and the page object which is stored in the variable ${iftttResult_0}, and we use it's property "id", ${iftttResult_0.id}, which is actually a page id of the page which was created)

In edit mode the macro looks like this:



Edit 'ConfiForms IFTTT Integration Rules' Macro

Event *

onCreated

Action to perform *

Create / Update ConfiForms Ent

Fire IFTTT action only when this condition/filter is met

If empty then IFTTT action is always executed when an event is occurred. Same syntax as in filters

Parameters to set on the entry

entryId=[entry.id]&linktopage=<a hre

As key=value pairs, separated by &. Where key is the field name in the form where this entry should be created and value is the value to be set. Could be constructed dynamically. You can reference record

Preview

Visible only in PREVIEW

How to configure ConfiForms IFTTT macro

The following fields are defined in the form **templateengineform** and can be referenced from IFTTT macro body using '${FIELD_NAME}' or '[entry.field_name]' notation.

- id
- createdBy
- ownedBy
- ownedByName
- createdByName
- created
- dateCreatedFormatted
- title
- linktopage
- status
- label

Important bits are: the action it does and the parameters

```
entryId=[entry.id]&linktopage=<a href="http://your_server/confluence/pages/viewpage.action?
pageId=${iftttResult_0.id}">[entry.title]</a>
```

As you can see, it updates the entry based on the entry.id and updates one of the entry fields with this HTML link

Where

- [entry.id] is replaced with record id of the record created
- ${iftttResult_0.id} uses a result of the previous IFTTT macro execution, and it is a pageId it asks for
- [entry.title] is replace with a page title (which is entered on the form)

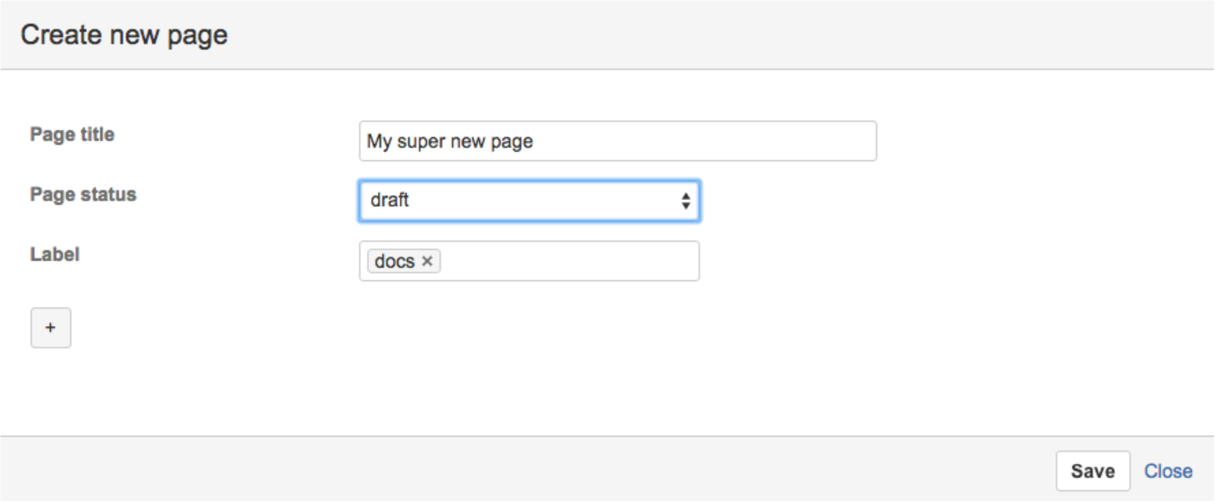
Better solution would be to have a "page/blogpost" field on your form and save the created page id to this field

Let's say we have a field of this type called "mypage". In this case to update it with newly created page id you will do something like

```
entryId=[entry.id]&mypage=[iftttResult_0.id]
```

Important to know that IFTTT macro body is also evaluated as Velocity template (unless this feature is globally switched off by your administrators) - Configuring ConfiForms IFTTT actions and rules#CreatePage

When the new page is to be created the dialog looks like this



Create new page

Page title: My super new page

Page status: draft

Label: docs ×

Why only 3 fields are visible? The reason is simple: hidden HTML and formula fields are not shown on the UI, but defined as field records and could be referenced to view their values

So, what happens when a user clicks "Save"

- A new page with a title given is created, **the layout for the page created is defined as a body of IFTTT macro** to create a page
- **Label or labels are assigned/added** to the created page
- When page is created another IFTTT macro kicks in **to update original ConfiForms record with a link to created page** (the concept in more details is described here: Creating links in original ConfiForms entry to just created page)

This is only a demonstration and the layout for the page created is very simple, you can of course add permissions to the Edit Controls we place on the page, so only certain user groups or users will be able to change page status. You can extend page layout as you wish, as long as the Confluence editor is happy about it or you can go "raw" and use Confluence storage format editor to edit it the way you like.

If you have any questions do not hesitate to contact us at vertuna(at)vertuna.com

Quick FAQ on creating pages

Why ConfiForms creates a broken page from Confluence template

When you setup ConfiForms to use Confluence templates to create the page it is very important to check how your ConfiForms IFTTT macro is configured

```
 <ac:structured-macro ac:macro-id="502e549e-8c5a-40ad-bf3f-a34e2a588bca" ac:name="confiform-ifttt" ac:schema-
version="1">
      <ac:parameter ac:name="action">Create Page</ac:parameter>
      <ac:parameter ac:name="event">onCreated</ac:parameter>
      <ac:parameter ac:name="title">test:[entry.id]</ac:parameter>
      <ac:rich-text-body>
        <p>[template.template_with_columns]</p>
      </ac:rich-text-body>
    </ac:structured-macro>
```

It should not contain any extras in it's macro body and only the reference to a template, as you can see in the example below

```
<p>[template.template_with_columns]</p>
```

as everything you have in your ConfiForms IFTTT macro body will go as a template contents and the page will be created from it. (No worries about <p></p> tags around the template - we can recognise them and safely remove them)

> This is extremely important when your Confluence template uses layouts! As Confluence is very fragile when the page is having a layout but does not start with a layout tags!

More on Confluence templates in ConfiForms Using Confluence templates with ConfiForms and avoid configuration duplication

Why ConfiForms "auto-wraps" everything with ConfiForms ListView on a created page

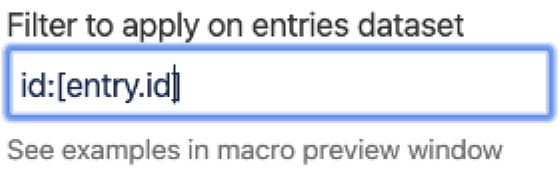
Before ConfiForms IFTTT creates a page it analyzes it's contents to see if you have some macros that need a "view" to work. This macros include: ConfiForms Field, ConfiForms Edit Controls, ConfiForms EntryViewer. But most important is ConfiForms Field macros that are placed alone, not inside the ConfiForms *View macros

When ConfiForms finds this it attempts to "fix" your template (and page) and adds the ConfiForms ListView macro around everything (filtered by current record). So your "viewless" ConfiForms Field macro will work

ConfiForms never auto-wraps the contents if each and every ConfiForms Field macro has been carefully placed inside "views" macros

Make sure you set the filter on the views to

```
id:[entry.id]
```



Filter to apply on entries dataset

id:[entry.id]

See examples in macro preview window

to dynamically show current record's data (this will be processed to have an actual ID, to limit the view to render the data for the current record's data that was used to create the page)

https://wiki.vertuna.com/display/CONFIFORMS/Advanced+integrations+with+IFTTT+macros+with+ConfiForms