

Form with sequential approvals workflow which uses IFTTT macro instead of Formula field



In this tutorial you will learn how to configure ConfiForms to provide sequential approvals workflow using actions defined by IFTTT macro rules.

This tutorial is not very simple, and you have to pay attention to details. And it is an alternative to the tutorial: [Creating form with sequential approvals workflow in Confluence with ConfiForms](#)

To learn the basics about ConfiForms see [Creating a simple form in Confluence with ConfiForms](#)

Same setup as in [Creating form with sequential approvals workflow in Confluence with ConfiForms](#) , but instead of Field Definition Rule for "statelabel" with a formula field we will have a number of IFTTT macros (macro updates the original record based on the condition we set)

We will have 3 user groups who should be able to approve a proposal in a sequential way, one by one and only when a proposal is in a certain state.

3 user groups (security groups in Confluence) are as follows:

- devs - developers security group
- pm - project managers group (gives approval after the DEVs)
- fin - finance (gives approvals after the PMs)

The form is very simple and has 2 common fields to capture the proposal text in a plaintext format and to set a readonly field to show the proposal approval state as a text.

For each user group we will setup own field control of type "checkbox" to change current approval state to next state. Fields are restricted to be editable by certain user group only

So in total we will have 5 fields here:

CONFI: ConfiForms Form | formName = proposals | registrationFormTitle = Register | saveButtonLabel = Register pr...

CONFI: ConfiForms Field Definition | fieldName = proposaltext | ...

CONFI: ConfiForms Field Definition | fieldName = statelabel | fi...

CONFI: ConfiForms Field Definition | fieldName = approvedByDevs ...

CONFI: ConfiForms Field Definition | fieldName = approvedByPM | ...

CONFI: ConfiForms Field Definition | fieldName = approvedByFin |...

CONFI: ConfiForms Registration Control

CONFI: ConfiForms Field Definition Rules | actionFieldName = statelabe...

- form has additional user groups set as administrators

- Ordinal textarea field (proposaltxt)
- Checkbox to track approvals by developers (see "devs" set as a user group this field is EDITABLE by this group only) Edit Restrictions on Field Definition is set to **devs**)
- Checkbox to track approvals by projects managers (see "pm" set as a user group this field is EDITABLE by this group only) Edit Restrictions on Field Definition is set to **pm**)
- Checkbox to track approvals by finance (see "fin" set as a user group this field is EDITABLE by this group only) Edit Restrictions on Field Definition is set to **fin**)
- We have also specified the rules to hide check box fields when record is created

The rule means that when an entry (record) does not have an ID (id:) then hide checkbox fields (field names are listed as csv: approvedByDevs, approvedByPM,approvedByFin)

- statelabel field is a simple text field which will hold the status label for us

And we will have 4 IFTTT rules which handle the approval state for us

1. The record get's created with state "Created"
2. When it is approved by Devs it get's a state "Approved By Devs" (condition in IFTTT: approvedByDevs:true)
3. When it is approved by PMs it get's a state "Approved by PMs" (condition in IFTTT: approvedByPM:true)
4. When it is approved by Finance it get's a state "Approved by Finance" (condition in IFTTT: approvedByFin:true)

3 IFTTTs are set on modify event and 1 is on created

CONFID: ConfiForms IFTTT Integration Rules | event = onCreate | action = Create ConfiForms Entry | title = entryId=[entry.id]&statu...

CONFID: ConfiForms IFTTT Integration Rules | event = onModified | action = Create ConfiForms Entry | condition = approvedByDevs:true...

CONFID: ConfiForms IFTTT Integration Rules | event = onModified | action = Create ConfiForms Entry | condition = approvedByPM:true |...

CONFID: ConfiForms IFTTT Integration Rules | event = onModified | action = Create ConfiForms Entry | condition = approvedByFin:true ...

The whole storage format for the form is listed below:

```
<ac:structured-macro ac:macro-id="81b6f18d-2cd2-4604-b9f3-7a3ea40d77fd" ac:name="conform" ac:schema-version="1">
  <ac:parameter ac:name="additionalFormAdmins">devs,pm,fin</ac:parameter>
  <ac:parameter ac:name="formName">proposals</ac:parameter>
  <ac:parameter ac:name="saveButtonLabel">Register proposal</ac:parameter>
  <ac:parameter ac:name="registrationFormTitle">Register</ac:parameter>
  <ac:rich-text-body>
    <p>
      <ac:structured-macro ac:macro-id="5e9e1e46-2d3d-4847-b4c4-01e7345b2a6c" ac:name="conform-field-definition" ac:schema-version="1">
        <ac:parameter ac:name="fieldName">proposaltext</ac:parameter>
        <ac:parameter ac:name="fieldLabel">Proposal text</ac:parameter>
        <ac:parameter ac:name="type">textarea</ac:parameter>
      </ac:structured-macro>
    </p>
    <p>
      <ac:structured-macro ac:macro-id="e4ddb043-92a7-4608-81f3-1e5b2138c58c" ac:name="conform-field-definition" ac:schema-version="1">
        <ac:parameter ac:name="fieldName">statelabel</ac:parameter>
        <ac:parameter ac:name="fieldLabel">State</ac:parameter>
        <ac:parameter ac:name="type">text</ac:parameter>
      </ac:structured-macro>
    </p>
    <p>
      <ac:structured-macro ac:macro-id="2e4eeef9-293e-4054-9e94-4297ea87ee17" ac:name="conform-field-definition" ac:schema-version="1">
        <ac:parameter ac:name="editRestrictions">devs</ac:parameter>
        <ac:parameter ac:name="fieldName">approvedByDevs</ac:parameter>
        <ac:parameter ac:name="fieldLabel">Approved (Devs)</ac:parameter>
        <ac:parameter ac:name="type">checkbox</ac:parameter>
      </ac:structured-macro>
    </p>
    <ac:structured-macro ac:macro-id="cad189f1-b3b6-4f33-8b79-95bd09898572" ac:name="conform-field-definition" ac:schema-version="1">
      <ac:parameter ac:name="editRestrictions">pm</ac:parameter>
      <ac:parameter ac:name="fieldName">approvedByPM</ac:parameter>
      <ac:parameter ac:name="fieldLabel">Approved By (PMs)</ac:parameter>
      <ac:parameter ac:name="type">checkbox</ac:parameter>
    </ac:structured-macro>
  </p>
</ac:structured-macro>
```

```

        <ac:structured-macro ac:macro-id="15424339-b023-4f46-8924-5798fa2246bb" ac:name="confiorm-field-
definition" ac:schema-version="1">
        <ac:parameter ac:name="editRestrictions">fin</ac:parameter>
        <ac:parameter ac:name="fieldName">approvedByFin</ac:parameter>
        <ac:parameter ac:name="fieldLabel">Approved By (Finance)</ac:parameter>
        <ac:parameter ac:name="type">checkbox</ac:parameter>
        </ac:structured-macro>
        <ac:structured-macro ac:macro-id="bace5ca5-6709-4915-ab2a-d460871e892d" ac:name="confiorm-entry-
register" ac:schema-version="1">
        <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="4cf642af-0a9e-41ab-817c-53dbf575db48" ac:name="confiorm-field-
definition-rules" ac:schema-version="1">
        <ac:parameter ac:name="condition">id:[empty]</ac:parameter>
        <ac:parameter ac:name="fieldName">approvedByDevs, approvedByPM, approvedByFin</ac:parameter>
        <ac:parameter ac:name="action">Hide field</ac:parameter>
        <ac:parameter ac:name="actionFieldName">statelabel</ac:parameter>
        </ac:structured-macro>
        </p>
        <p>
        <ac:structured-macro ac:macro-id="dc49fcc8-7dd0-4ebe-b062-da5f88970cea" ac:name="confiorm-field-
definition-rules" ac:schema-version="1">
        <ac:parameter ac:name="condition">id:[empty]</ac:parameter>
        <ac:parameter ac:name="fieldName">statelabel</ac:parameter>
        <ac:parameter ac:name="action">Hide field</ac:parameter>
        <ac:parameter ac:name="actionFieldName">statelabel</ac:parameter>
        </ac:structured-macro>
        </p>
        <ac:structured-macro ac:macro-id="e0764127-8f55-4ff0-bbc8-d942186acae6" ac:name="confiorm-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]&statelabel=Created</ac:parameter>
        <ac:rich-text-body>
        <p> </p>
        </ac:rich-text-body>
        </ac:structured-macro>
        <ac:structured-macro ac:macro-id="a6829260-ae72-47a8-8ab6-10e2052f3e3a" ac:name="confiorm-ifttt" ac:schema-
version="1">
        <ac:parameter ac:name="condition">approvedByDevs:true</ac:parameter>
        <ac:parameter ac:name="action">Create ConfiForms Entry</ac:parameter>
        <ac:parameter ac:name="event">onModified</ac:parameter>
        <ac:parameter ac:name="title">entryId=[entry.id]&statelabel=Approved By Devs</ac:parameter>
        <ac:rich-text-body>
        <p> </p>
        </ac:rich-text-body>
        </ac:structured-macro>
        <ac:structured-macro ac:macro-id="d7732e21-cc32-4e70-97f2-a2af333ff262" ac:name="confiorm-ifttt" ac:schema-
version="1">
        <ac:parameter ac:name="condition">approvedByPM:true</ac:parameter>
        <ac:parameter ac:name="action">Create ConfiForms Entry</ac:parameter>
        <ac:parameter ac:name="event">onModified</ac:parameter>
        <ac:parameter ac:name="title">entryId=[entry.id]&statelabel=Approved By PMs</ac:parameter>
        <ac:rich-text-body>
        <p> </p>
        </ac:rich-text-body>
        </ac:structured-macro>
        <ac:structured-macro ac:macro-id="d635786d-7a00-478f-a308-7cb7dfb6f030" ac:name="confiorm-ifttt" ac:schema-
version="1">
        <ac:parameter ac:name="condition">approvedByFin:true</ac:parameter>
        <ac:parameter ac:name="action">Create ConfiForms Entry</ac:parameter>
        <ac:parameter ac:name="event">onModified</ac:parameter>
        <ac:parameter ac:name="title">entryId=[entry.id]&statelabel=Approved By Finance</ac:parameter>
        <ac:rich-text-body>
        <p> </p>
        </ac:rich-text-body>
        </ac:structured-macro>
</ac:rich-text-body>

```

```
</ac:structured-macro>
```

This is about everything about form configuration, let's proceed with an actual approvals workflow.

We use ListView macro to show the data and have setup multiple edit buttons what are visible to certain user groups. Here is how it looks in the editor

CONF: ConfiForms ListView | formName = proposals

Proposal:

CONF: ConfiForms Field | fieldName = proposaltext

CONF: ConfiForms Field | fieldName = statelabel CONF: ConfiForms Edit Controls | showBoth = false | editButt... CONF: ConfiForms Edit Controls | showBoth = false | editButt...

CONF: ConfiForms Edit Controls | showBoth = false | editButt...

So, we reference the form by name ("proposals") and put references to field definitions using ConfiForms Field macros. So far, so good. Simple and straightforward. The trick though is with configuration of ConfiForms Edit Controls. We want it to appear only for certain user groups and only when a record is in certain condition. Let's see it in details:

- First edit button, we call it "ApproveDEV" has the following settings

Edit 'ConfiForms Edit Controls'

Valid redirect URL

URL to redirect after successful 'save' operation. Could be constructed dynamically. You can reference record owner as [owner]; record modifier, as [modifier]; current user as [user] any record field as [entry.FIELD_NAME]

Visible only to groups/users

devs

Comma-separated list of group names/usernames this field is visible to. Leave blank if there are no restrictions

Hide controls when stored data (for given record) matches this criteria

approvedByDevs:true

Same syntax as in filters

Select macro

Visible to only "devs" user group and hidden if already approved

- Second edit button, we call it "ApprovePM" has the following settings

Edit 'ConfiForms Edit Controls'

Valid redirect URL

URL to redirect after successful 'save' operation. Could be constructed dynamically. You can reference record owner as [owner]; record modifier, as [modifier]; current user as [user] any record field as [entry.FIELD_NAME]

Visible only to groups/users

pm

Comma-separated list of group names/usernames this field is visible to. Leave blank if there are no restrictions

Hide controls when stored data (for given record) matches this criteria

approvedByFin:true OR approvedByPM:true

Same syntax as in filters

Select macro

Visible to only "pm" group and hidden when the following condition is met:

approvedByFin:true OR approvedByPM:true OR approvedByDevs:false

Explanation: Button will be hidden when it already approved by PMs, or not approved yet by DEVs, or already approved by FINANCE

- Third edit button, we call it "ApproveFIN" has the following settings

Edit 'ConfiForms Edit Control'

Valid redirect URL

URL to redirect after successful 'save' operation. Could be constructed dynamically. You can reference record owner as [owner]; record modifier, as [modifier]; current user as [user] any record field as [entry.FIELD_NAME]

Visible only to groups/users

Comma-separated list of group names/usernames this field is visible to. Leave blank if there are no restrictions

Hide controls when stored data (for given record) matches this criteria

Same syntax as in filters

Select macro

Visible to only users in "fin" user group and hidden when the following condition is met:

approvedByFin:true OR approvedByPM:false OR approvedByDevs:false

Explanation: Button will be hidden when it already approved by FINANCE, or not approved yet by PMs or not yet approved by DEVs

Full storage format for this list view is listed below

```
<ac:structured-macro ac:macro-id="96b70748-706b-4115-aaf2-5b9ae013b151" ac:name="conform-list"
                        ac:schema-version="1">
<ac:parameter ac:name="formName">proposals</ac:parameter>
<ac:rich-text-body>
  <h3>Proposal:</h3>
  <p>
    <ac:structured-macro ac:macro-id="ab7fd363-7416-40c7-b9fa-58d253f49c81" ac:name="conform-field"
                        ac:schema-version="1">
      <ac:parameter ac:name="fieldName">proposaltext</ac:parameter>
    </ac:structured-macro>
  </p>
  <p>
    <strong>
      <ac:structured-macro ac:macro-id="cf8c064e-18f4-48ea-922c-18b9b348f13d" ac:name="conform-field"
                        ac:schema-version="1">
        <ac:parameter ac:name="fieldName">statelabel</ac:parameter>
      </ac:structured-macro>
    </strong>
    <ac:structured-macro ac:macro-id="f04196d7-d5fe-49ed-a347-7a7234fe1b96" ac:name="conform-entry-
edit"
                        ac:schema-version="1">
      <ac:parameter ac:name="restrictions">devs</ac:parameter>
      <ac:parameter ac:name="showBoth">>false</ac:parameter>
      <ac:parameter ac:name="hideIfMatches">approvedByDevs:true</ac:parameter>
      <ac:parameter ac:name="updateMessage">Approved</ac:parameter>
      <ac:parameter ac:name="editButtonLabel">ApproveDEV</ac:parameter>
    </ac:structured-macro>
    <ac:structured-macro ac:macro-id="c69b2a2c-b742-448d-be62-118d36680eb3" ac:name="conform-entry-
edit"
                        ac:schema-version="1">
      <ac:parameter ac:name="restrictions">pm</ac:parameter>
      <ac:parameter ac:name="showBoth">>false</ac:parameter>
      <ac:parameter ac:name="hideIfMatches">approvedByFin:true OR approvedByPM:true OR approvedByDevs:
false
      </ac:parameter>
      <ac:parameter ac:name="updateMessage">Approved</ac:parameter>
      <ac:parameter ac:name="editButtonLabel">ApprovePM</ac:parameter>
    </ac:structured-macro>
    <ac:structured-macro ac:macro-id="4ae8ce8d-066b-40b4-a74a-a564f58dc03a" ac:name="conform-entry-
edit"
```

```

        ac: schema-version="1">
        <ac:parameter ac:name="restrictions">fin</ac:parameter>
        <ac:parameter ac:name="showBoth">false</ac:parameter>
        <ac:parameter ac:name="hideIfMatches">approvedByFin:true OR approvedByPM:false OR approvedByDevs:
false
        </ac:parameter>
        <ac:parameter ac:name="updateMessage">Approved</ac:parameter>
        <ac:parameter ac:name="editButtonLabel">ApproveFIN</ac:parameter>
        </ac:structured-macro>
    </p>
    <p>&nbsp;</p>
</ac:rich-text-body>
</ac:structured-macro>

```

And this is how the form looks like in Confluence view mode:

[Register](#) [Form: proposals](#)

Proposal:

Let's develop code bugs-free!

Proposal:

I need a proper coffee machine... like a "real one"

Proposal:

Another proposal here

Approved By PMs

This is how it is seeing by FINANCE team

Office proposals

[Register](#) [Form: proposals](#)

Proposal:

Let's develop code bugs-free!

Proposal:

I need a proper coffee machine... like a "real one"

Proposal:

Another proposal here

Approved By PMs [ApproveFIN](#)