Using ConfiForms Field Definition Rules macro to reduce number of choices in a dropdown field based on the value selected in another field

In this tutorial you will learn how to Use ConfiForms Field Definition Rule to reduce a number of choices in a dropdown field.

We will consider 2 setups - one which uses database and another, which uses other form.

This tutorial is aplicable not only to dropdown fields, but also to:

- radio group fields
- advanced dropdowns
- multi-select fields
- checkbox groups fields

🕕 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. 🙂

Let's start with form design. It will have just 2 fields

- a checkbox field called "includeActiveOnly"
- a dropdown field called "choices" with values loaded from
 - ° a database table
 - $^{\circ}~$ another form

This means that we will have 2 variants of the same form (or 2 forms you may say)

Dropdown choices from a database table

Let's start with the one which has a dropdown field with the values loaded from a database table

A table we connect as a dropdown source has the following structure

ID	NAME	IS_ACTIVE
1	This one	true
2	Another	true
3	Some inactive	false
4	Quattro	true
5	Obsolete	false

This is stored in a table called "cf_demo_values"

create table cf_demo_values (id INTEGER NOT NULL, name CHARACTER(50) NOT NULL, is_active boolean);

Our "choices" dropdown is configured as follows

Edit 'ConfiForms Form Field (Definition)' Macro

Required *	G Preview	
Field type		
Database dropdown		•
Database connection		
testing-db 🔻		
Configure NEW connection		
SQL Query		
select id, name, is_active from cf_demo_values		
Type SQL query, where first column will be taken as ID and second column will be taken as LABEL. All other columns will be ignored If input box is disabled then your Confluence admnistrator has pre-defined a query for you		

Select macro

It uses the SQL to load the values

select id, name, is_active from cf_demo_values

Important note is that we actually load the values for all 3 columns, while only first 2 columns are used directly when showing the values in the dropdown.

However... we need these values from a 3rd column into our dataset to use then later in a filter (in ConfiForms Field Definition Rule)

Important!
 When SQL is loaded into ConfiForms the names for columns which have underscore (_) in their names are removed

So, in our case the column "is_active" becomes "isactive"

This is very important when you use it in a filter later, see below

Then form in the view mode looks like this

Only active Your choice	· · · · · · · · · · · · · · · · · · ·	
		Save Close
And this is how it looks in the design mode		
CONFIF ConfiForms Form (Definition)	formName = f	
ConfiForms Form Registrat	tion Control	
CONFIF ConfiForms Form Field (D	efinition) fieldName = includeActiveOn	
CONFIF ConfiForms Form Field (D	efinition) fieldName = choices field	
ConfiForms Rules for Field	d Definition actionFieldName = includeAc	
CONFIF ConfiForms Rules for Field	d Definition actionFieldName = includeAc.	

Let's see how the 2 last macros (Field Definition Rules) are configured

Edit 'ConfiForms Rules for Field Definition' Macro

Rules for ConfiForms Field Definitions Documentation	G Preview	
Definitions Documentation		
Field name		
includeActiveOnly		
Name of the field you want to track (optional for validation rules and for rules which should be executed ONLY on users action)		
Condition		
includeActiveOnly:true		
Action will be executed when condition is met. Same syntax expected as in filters The scope is current entry/record (for dataset validation the scope is all records). You can reference current records fields via [entry.field_name]		
Execute only on user action		
Action *	S Preview	
Apply Filter on a field		
Choose Action to perform		
Actionable field name		
choices		
Could be list of field names (comma separated) you want the action to be performed on		
Filter to apply on a field		
isactive:true		
Use this to filter dropdown (simple, smart or db) field choices. Filter is applied on a referenced form and dataset! You can use [entry.FIELD_NAME] references which are evaluated against the current record		
With reverse rule		
When checked. ConfiForms will trv to		
Select macro		Save Cancel

See an important bit on the filter field - we take only "active" rows. This "isactive" field value comes from an SQL, from a field "is_active"

This rule fires when checkbox is checked

Here is how the 2nd Rule is configured

Edit 'ConfiForms Rules for Field Definition' Macro

Rules for ConfiForms Field	*	G Preview
Definitions Documentation		
Field name		
includeActiveOnly		
Name of the field you want to track (optional for validation rules and for rules which should be executed ONLY on users action)	ļ	
Condition		
includeActiveOnly:false		
Action will be executed when condition is met. Same syntax expected as in filters The scope is current entry/record (for dataset validation the scope is all records). You can reference current records fields via [entry.field_name]		
Execute only on user action	+	
ACIION ~	*	C Preview
Apply Filter on a field		J Fleview
Choose Action to perform		
Actionable field name		
choices		
Could be list of field names (comma separated) you want the action to be performed on		
Filter to apply on a field	ii.	
*		
Use this to filter dropdown (simple, smart or db) field choices. Filter is applied on a referenced form and dataset! You can use [entry.FIELD_NAME] references which are evaluated against the current record		
With reverse rule When checked, ConfiForms will try to		
create a reverse rule for niven rule	•	
Select macro		Save Cancel

In a filter we tell it to take ALL (this rule fires when checkbox is not checked)

Dropdown choices from another form

This is a 2 version of the form, when your dropdown field is actually takes the values from another ConfiForms Form (using a "smart" field, a "smart" dropdown)

In the edit mode the form looks exactly the same as in the 1st version.

But the difference is in how the "choices" field is configured

It is configured to take the vlues from another ConfiForms Form with the following structure

- Field to store name (field types is "text")
- Field to store the status (active or inactive), with field type "checkbox"

Same set of values as in the database version

Register & Form: choicesForm -						
Name	Is active	Edit				
Obsolete	no	Edit Delete				
Quattro	yes	Edit Delete				
Some inactive	no	Edit Delete				
Another	yes	Edit Delete				
This one	yes	Edit Delete				

And the "choices" field is configured like this:

Edit 'ConfiForms Form Field (Definition)' Macro

Your choice	•	G Preview	
Required *	÷.	T	
Field type			
Smart Dropdown 🔻			
Page where the ConfiForms Form is defined			
~sash:FORM2 Using ConfiForms			
Form name			
choicesForm •			
Field name(s)			
Name [name]			
Reference to field values			
(check this option if the field you are referencin NOT a dropdown/multi-select/status. When	ng, i 🔻		

Select macro

Save Cancel

Taking the values from a "choiceForm" and showing those in teh dropdown

As we have the same field name to show if the choice is active or not the Field Definition Rules stay the same as in the version 1 of the form.

Giving us the same result in the end

	-		
Only active			
Your choice	Quattro	•	
+			
		Sav	Close

Showing only active choices and serving them from another ConfiForms Form

Complete solution for version 1 of the form

```
<ac:structured-macro ac:macro-id="29ea6581-a183-4fac-b595-8161170b3d06" ac:name="confiform" ac:schema-version="
1">
 <ac:parameter ac:name="formName">f</ac:parameter>
 <ac:rich-text-body>
   <ac:structured-macro ac:macro-id="ec132d3d-37c5-48d8-8a11-afc352b2e01a" ac:name="confiform-entry-register"
ac:schema-version="1">
     <ac:rich-text-body>

     </ac:rich-text-body>
   </ac:structured-macro>
    <ac:structured-macro ac:macro-id="a35a3f59-9af3-4b51-a083-e3666d6e033a" ac:name="confiform-field-
definition" ac:schema-version="1">
       <ac:parameter ac:name="fieldName">includeActiveOnly</ac:parameter>
       <ac:parameter ac:name="fieldLabel">Only active</ac:parameter>
       <ac:parameter ac:name="type">checkbox</ac:parameter>
     </ac:structured-macro>
    <ac:structured-macro ac:macro-id="94905715-ee3a-440c-9556-86db790db4a9" ac:name="confiform-field-
definition" ac:schema-version="1">
       <ac:parameter ac:name="fieldName">choices</ac:parameter>
       <ac:parameter ac:name="fieldLabel">Your choice</ac:parameter>
       <ac:parameter ac:name="values">select id, name, is_active from cf_demo_values</ac:parameter>
       <ac:parameter ac:name="extras">7422036e-9a6f-4455-92d9-7140131fb9da</ac:parameter>
       <ac:parameter ac:name="type">dbselect</ac:parameter>
     </ac:structured-macro>
   <a>c</a>
     <ac:structured-macro ac:macro-id="afcef165-b323-4b02-adb0-9cfd00d61da2" ac:name="confiform-field-
definition-rules" ac:schema-version="1">
       <ac:parameter ac:name="condition">includeActiveOnlv:true</ac:parameter>
       <ac:parameter ac:name="fieldName">choices</ac:parameter>
       <ac:parameter ac:name="values">isactive:true</ac:parameter>
       <ac:parameter ac:name="action">Apply Filter on a field</ac:parameter>
       <ac:parameter ac:name="actionFieldName">includeActiveOnly</ac:parameter>
     </ac:structured-macro>
   <ac:structured-macro ac:macro-id="310c818c-9460-4d7b-a780-ba66ba4c5dda" ac:name="confiform-field-
definition-rules" ac:schema-version="1">
       <ac:parameter ac:name="condition">includeActiveOnly:false</ac:parameter>
       <ac:parameter ac:name="fieldName">choices</ac:parameter>
        <ac:parameter ac:name="values">*</ac:parameter>
       <ac:parameter ac:name="action">Apply Filter on a field</ac:parameter>
       <ac:parameter ac:name="actionFieldName">includeActiveOnly</ac:parameter>
     </ac:structured-macro>
   </ac:rich-text-body>
</ac:structured-macro>
```