

# README - Flokzu in General

## danger on making flow changes

create different versions for the changes and disable the automatically migration of instances. old instances should remain on old versions while only new instances should run on the new deployed version

## general tips

### at first roll-out - assign all tasks to self (as administrator) and user

BECAUSE if there are tasks you want to be able to take action in then you should assign task to self **as well** (otherwise only viewing rights)

#### EXAMPLE CASE

LLM generates summaries from one (or field) form fields (and populates text field) *in backend* if results now visible at very next tasks may need to make manual corrections to resulting field (in which case crucial that said task is editable) till LLM prompt refined may need to make alterations

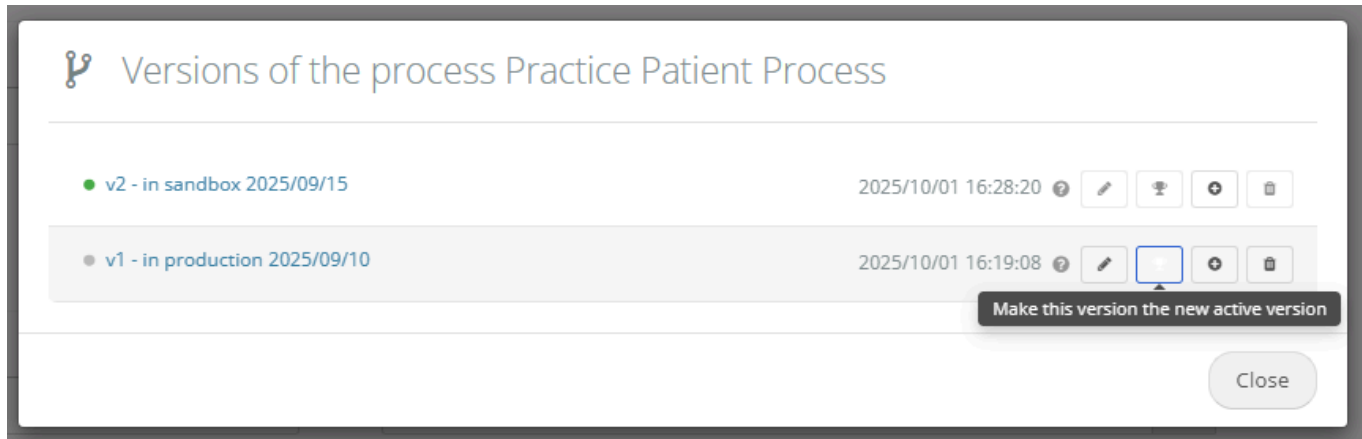
## when deploying new version

### during staggered deployment (with multiple versions)

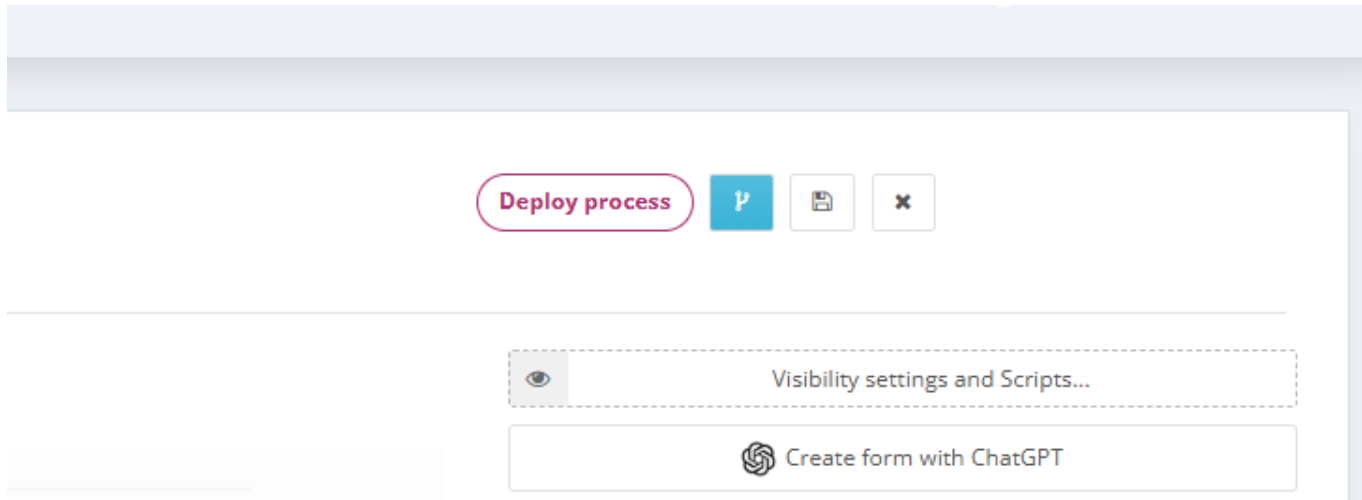
create tasks eg "INTERAL end of deployment v{ } phase { }" at desired stages of v1 assigned to development team

when flow then duplicated to configure next version "blockers" present (update name v{ +1}) this way able to manage various stages **and** versions of deployment

step one:



step two:



actually also then save and deploy again

## warning on changing tasks names with script / visibility changes

✗ **do NOT do this**

unlike form fields where name can be altered but "identity" retained ([info on how system handles change in field name](#))

a different task name is equivalent to different task

if instances already exists in task and scripts / visibility changed  
then this affects those tasks

BUT

if task name is changed  
then changes to scripts and/or fields visibility do **not** carry over

(ie. you are stuck with instances behaving as they did with previously named tasks - its script and fields)

*this is especially problematic for new scripts or form fields*

*and devastating if new form fields are used in flow (at gateways)*

*will have to introduce an additional tasks directly afterwards where this new field can then be set correctly (since wont appear in renamed task)*

#### ✓ when to do this

1. as long as no changes in script / fields also introduced
2. no instances existing in task (or will be created while in updates development)

#### NOTE - not tested

#### 🔗 ?! possible way around it

*if instances exists in task where name and function (script and/or visibility) have to be updated*

1. add script and/or change field visibility to tasks as is
2. use real-time report to check that new script and/or field visibility is "applied" to existing tasks (instances in tasks)
3. if so then go change name

this way the instances already existing in tasks (with old name) will have new script and/or field visibility applied (albeit no change in task name)  
and any other instances moving into said task after latest deployment will have updated task name, script and/or field visibility

## warning when using "end-of-process" items

#### 📄 [Common Errors](#)

✗ **NB end of process only appears when last of its tokens reach end-of-process**

and then in real-time will reflect name of **last** end of process completed

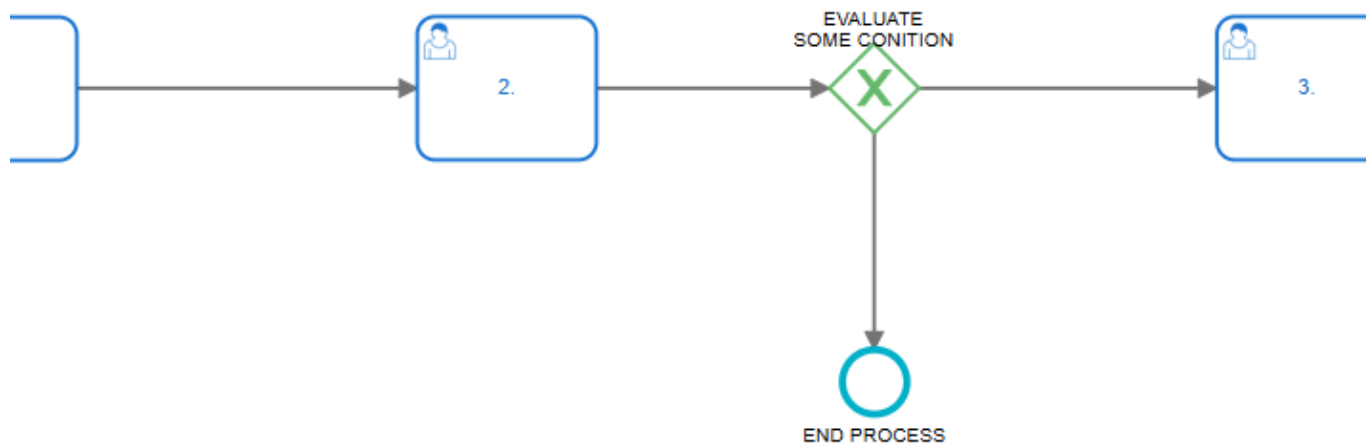
#### NOTICE:

those conditions are usually form fields

so could be overcome by deleting said field but then all the data from that field for previous instances also lost

#### with exclusive gateway

here there is a decision after task 2. where if some condition is met the instance moves to task 3. or END OF PROCESS



lets say there some instances (called FLOW-1, FLOW-2) where now created with this flow (and lying in task 1. or 2.)

then the flow is updated as follows (exclusive gateway removed)

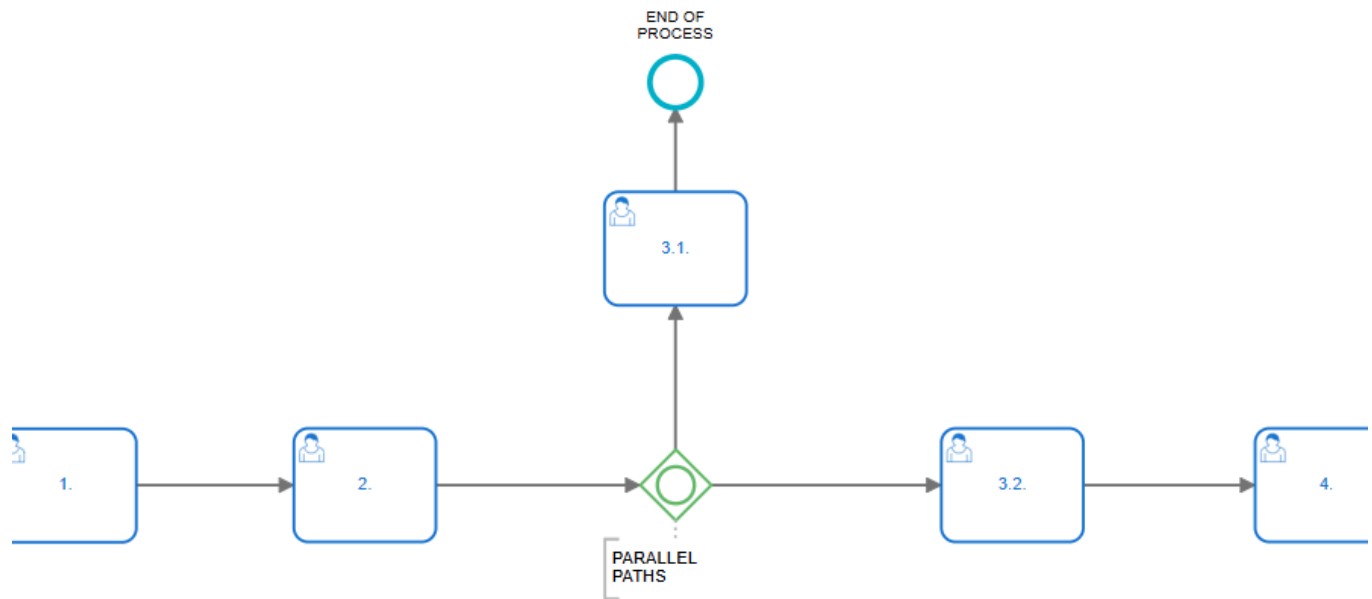


when those instances FLOW-1, FLOW-2 are completed in task 2., if they meet the previous condition they move to “END OF PROCESS” instead of all moving 3.

on the other hand, any instances created after the update is complete (deployed), the flow will follow 1. → 2. → 3. as expected

### with inclusive gateway

here the instances that move past task 2. split to task 3.1 and 3.2., where 3.1. runs to a END OF PROCESS and 3.2. continues with flow to 4. and so forth



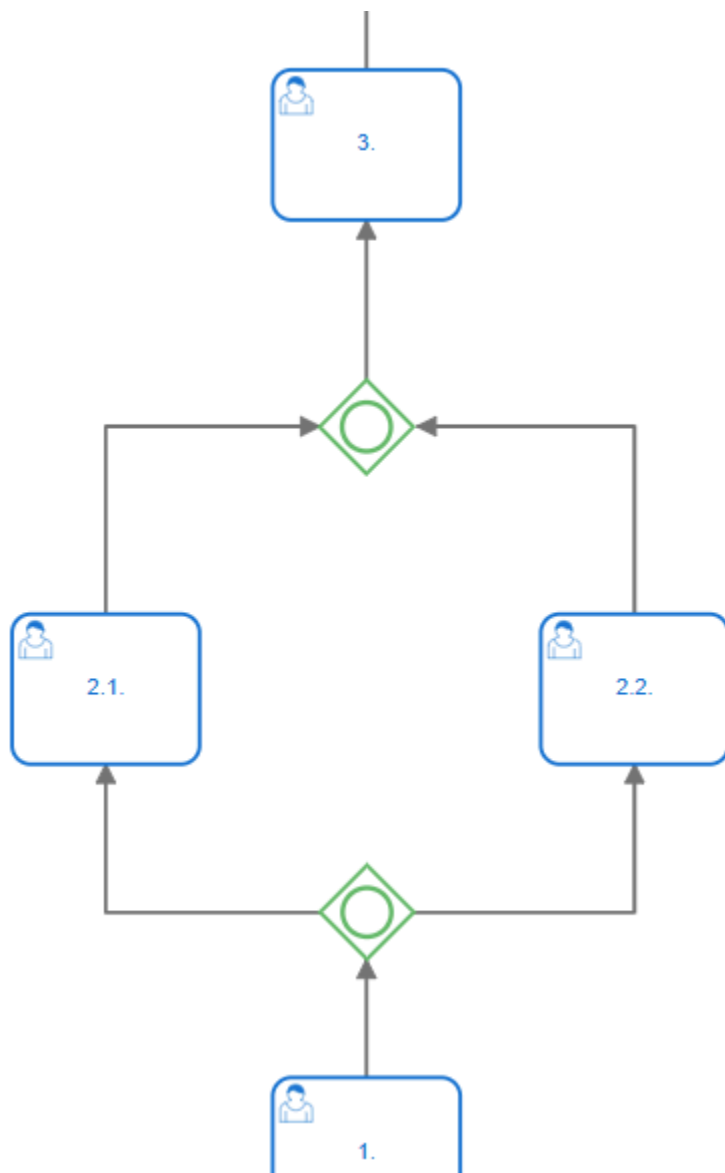
lets say there are instances (called FLOW-1, FLOW-2) where created with this flow ie. as the live / deployed version (and lying in tasks 1. or 2.)  
then the flow is updated to remove the inclusive gateway (so that task 3.1 moves directly to 4. and 3.2 no longer exists)



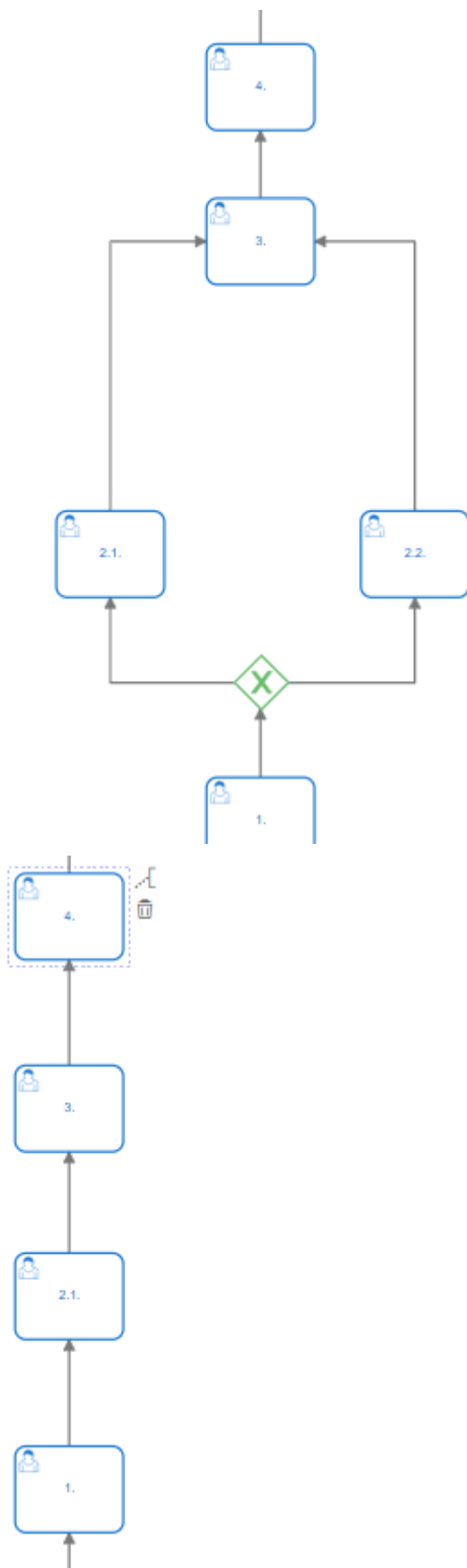
when instances FLOW-1 and FLOW-2 are completed in 2. they move to END OF PROCESS instead of continuing to 3.1. and then 4.

WHY THIS IS STRANGE:

making changes like this works fine (even with tasks still in 2.2. when it is deleted)  
but as soon as a “end-of-process” is involved the updates to flow seem to be irrelevant



or



to

**warning of field visibility at step that prevents scripts from executing**



as default make all fields "involved" in script Editable at given task and use script to set as hidden or read-only

reason being

1. script can retrieve value form read-only field ( `.getFieldValue` ) but is unable to update ( `.setFieldValue` ) read-only
2. script cannot retrieve nor update hidden fields

## warning on field visibility at step that prevents user interaction

### field hidden at task and required by script

at given task



Show Other (Yes/No) ● Editable

Other (Text) ● Hidden

*field set to hidden*

*expect script to make required*

*but fails*

```
function showField(){  
    var show = Flokzu.getFieldValue([[Show Other]]);  
    if (show === true){Flokzu.setRequired([[Other]])}  
    // else {Flokzu.setHidden([[Other]])}  
}  
Flokzu.onInit(showField);  
Flokzu.onChange([[Show Other]], showField);
```

NOTICE: does not work with or without "else" condition

### after deployment

Show Other

☐ No

Show Other

☒ Yes

## field read-only at task and required with script

at given task



Show Other (Yes/No)

Other (Text)

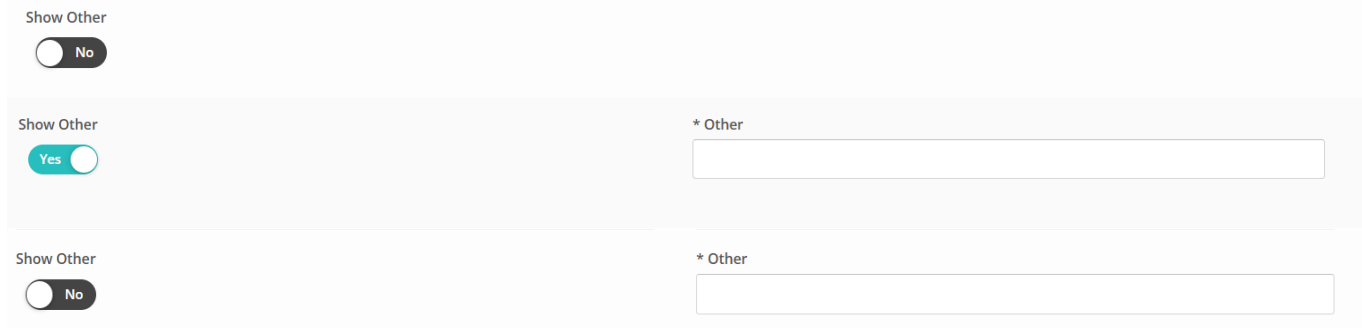
*field set to read-only*

*expect script to make required*

*semi-succeeds*

```
function showField(){  
    var show = Flokzu.getFieldValue([[Show Other]]);  
    if (show === true){Flokzu.setRequired([[Other]])}  
    Flokzu.onInit(showField);  
    Flokzu.onChange([[Show Other]], showField);  
}
```

## after deployment



Show Other

Show Other

Show Other

\* Other

\* Other

*could be result of no else condition to reset / change field visibility*

*demonstrated below*

## field read-only at script and hidden or required with script

at given task



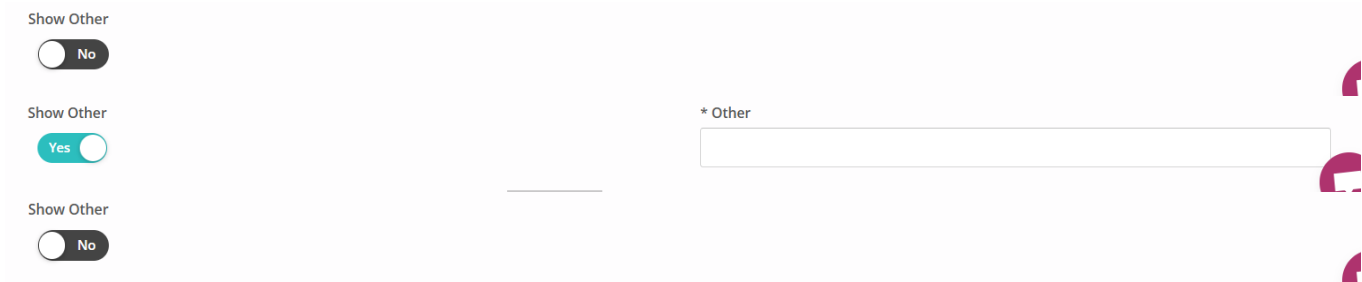
Show Other (Yes/No) Editable

Other (Text) Read-only

*field set to read-only  
expect script to make required OR hide  
succeeds*

```
function showField(){  
    var show = Flokzu.getFieldValue([[Show Other]]);  
    if (show === true){Flokzu.setRequired([[Other]])}else {  
Flokzu.setHidden([[Other]]) }  
    }  
    Flokzu.onInit(showField);  
    Flokzu.onChange([[Show Other]], showField);
```

after deployment



Show Other No

Show Other Yes \* Other

Show Other No

*and continues to work with every change  
therefore require else condition*

NOTICE

same behavior when using **editable**

RULE OF THUMB

have all fields "used" in script set to editable and let script dictate whether hidden, read-only or required

ALTHOUGH

able to use *read-only fields* if **only requirement** is to "fetch field value" Flokzu.getFieldValue

THEREFORE

if you were planning to set the fields to read-only in script

save the extra effort and make read-only in tasks

*if however will be hidden could just as well leave editable and hide with script*

## how to set up External Forms from other processes to interact with current one

*external form can be specified in this way s/t they auto-populate when said external form is initialized*

### in main form

1. set all fields involved to editable

*NOTE: for those fields where plan to set hidden and ONLY use .getFieldValue instead of duplicating work  
can be hidden at step*

2. use script to update field with link to external form

```
function externalForm(){
    var id = $('#fkz_ref').text();
    var number = Flokzu.getFieldValue([[Number]]);
    var name = Flokzu.getFieldValue([[Name]]);
    var surname = Flokzu.getFieldValue([[Surname]]);
    var fullname = name + ' ' + surname;
    var first = 'https://app.flokzu.com/public/----?Number=';
    var second = '&Name=';
    var third = '&ID=';
    var URL = first.concat(number, second, fullname, third, id);
    // ALTERNATIVE FORMAT using text field instead of weblink
    // required for cases where https: contains blank spaces
    // var link = '<a href="' + URL + '">Name of Link</a>';
    Flokzu.setFieldValue([[External Link]], URL); //
    Flokzu.setFieldValue([[External Link]], link);
    // Flokzu.setHidden([[External Link]]); // POST-TESTING
}

Flokzu.onInit(externalForm);
// Flokzu.onChange([[ ]], externalForm);
```

### in external form

3. create all fields that will be required for url to populate  
editable

4. include field to hold (current) external form process identifier

**integer**

**hide**

*Flokzu backend able to update hidden fields*

5. retrieve form fields from url using script

```
// EXAMPLE
// https://app.flokzu.com/public/----?Number=123&Name=Me&ID=3

$.urlParam = function(name){ // dont touch!!!!
    var results = new RegExp('[\?&]' + name + '='
([^\&#]*)').exec(window.location.href);
    console.log(results);
    if (results == null){
        return null;
    }
    else {
        return decodeURI(results[1]) || 0;
    }
}

function Defaultfields(){

    var number= $.urlParam('Number');
    var name= $.urlParam('Name');
    var id = $.urlParam('ID');

    console.log(number);

    Flokzu.setFieldValue([[Number]], number);
    // Flokzu.setReadOnly([[Number]]); // POST-TESTING

    Flokzu.setFieldValue([[Name & Surname]], name);
    // Flokzu.setReadOnly([[Name & Surname]]); // POST-TESTING

    Flokzu.setFieldValue([[Main Process ID]], id);
    // Flokzu.setHidden([[Main Process ID]]); // POST-TESTING


}


Flokzu.onInit(Defaultfields);
```

## 6. get form id


ere...


Advanced

 App Integration

  
Echo

flokzuOperations

 GET Identifier

 Echo

Input

Output

Authentications

Parameter name	Value
Parameter 1	Identifier
Parameter 2	- Select... -
Parameter 3	- Select... -
Parameter 4	- Select... -

[Change integration type](#)

Cancel

Accept



## App Integration



Echo

flokzuOperations



GET Identifier



Echo

Input

Output

Authentications

Parameter name

Field

Parameter 1

Follow Up Form Identifier

Parameter 2

- Select a field -

Parameter 3

- Select a field -

Parameter 4

- Select a field -

[Change integration type](#)

Cancel

Accept

7. then update main process

App Integration

Edit a process instance

update main process with form id

Practice Patient Process <PPBUILD>

Input Output

Target Field	Form Field
Identifier -	Practise Patient Process ID
Consent Form Identifier	Consent Form Identifier

Click here to add a parameter...

[Change integration type](#) Cancel Accept

## test

8. create instance and move to task of interest
9. check in main form field with link to external form updated
10. open newly generated link and verify fields that should have auto-populated as expected
11. complete external form
12. refresh main process task and verify external form instance id updated as expected
13. once that is satisfied and to script [in main form](#) and [in external form](#)] to set hidden / read only

## how field visibility may prevent script form executing / user interaction



## **fields updated by script**

must be editable at that task where script runs

## **conditionally visible fields**

must be editable at that task where script runs

*cannot have hidden field be set to required by script (user cannot interact)*

**therefore for fields that appear based on values of other fields**

**must be editable and then hidden by script**

## **fields from which values retrieved by script**

must be editable or read-only

and then set to hidden when initiated

BUT

## **fields updated from database**

can be hidden

**when setting up db interaction from form field (trigger)  
input**

lookup value from db (recommend using unique identifier)

Create Trigger

REST Web Service URL (GET)

https://app.flokzu.com/flokzuopenapi/api/ddc24296137514252fb96351a0d

Input

Output

Authentications

Parameter name	Value		
ParamName	Number	<div></div>	<div></div>
paramValue	Number	<div></div>	<div></div>

Click here to add a parameter...

The trigger is fired when the value of the field is updated, autocompleting the output fields with values returned by the Web Service. E.g.: select a vendor from a combo box and the Name and Phone fields are completed automatically.

Remove trigger

Cancel

Accept

set up in field "Number"

output

how to populate fields

Create Trigger

REST Web Service URL (GET)

<https://app.flokzu.com/flokzuopenapi/api/ddc24296137514252fb96351a0d>

Input Output Authentications

Parameter name ?	Field
Name	Name
DB ID	DB ID

Click here to add a parameter...

The trigger is fired when the value of the field is updated, autocompleting the output fields with values returned by the Web Service. E.g.: select a vendor from a combo box and the Name and Phone fields are completed automatically.

Remove trigger Cancel Accept

NB **Parameter name** should match db column name **exactly**

## WARNING

trying to populate the db ID field this way does **not** work

whereas [and return db id to form](#) does work therefore consider flow of [add to / edit record in db](#)  
only annoyance is that error log will show errors when new db entry is made since unable to find matching record in db

although benefit is does work even if no value is given in "unique identifier" field - simply add record to db without any

## adding and editing instances in db after task

### NOTICE

*fields used to store db primary key **must be integer** and **can be hidden** throughout*

## add record to db



## App Integration

Create a new record



ADD TO DB



Test Database

Input

Output

Target Column

Form Field

Number



Number



Name



Name



Click here to add a parameter...

[Change integration type](#)

Cancel

Accept

and return db id to form

field can be set hidden

App Integration

Create a new record

ADD TO DB

Test Database

Input

Output

Output

Id

Target Field

DB ID

Click here to add a parameter...

[Change integration type](#)

Cancel

Accept

edit record based on db id

based on [and return db id to form](#)

**App Integration**

Edit a record

EDIT DB

Test Database

**Input** Output

Target Column	Form Field
- Id -	DB ID
Name	Name
Number	Number

Click here to add a parameter...

☐ Insert record if it does not exist

[Change integration type](#) Cancel Accept

## add to / edit record in db

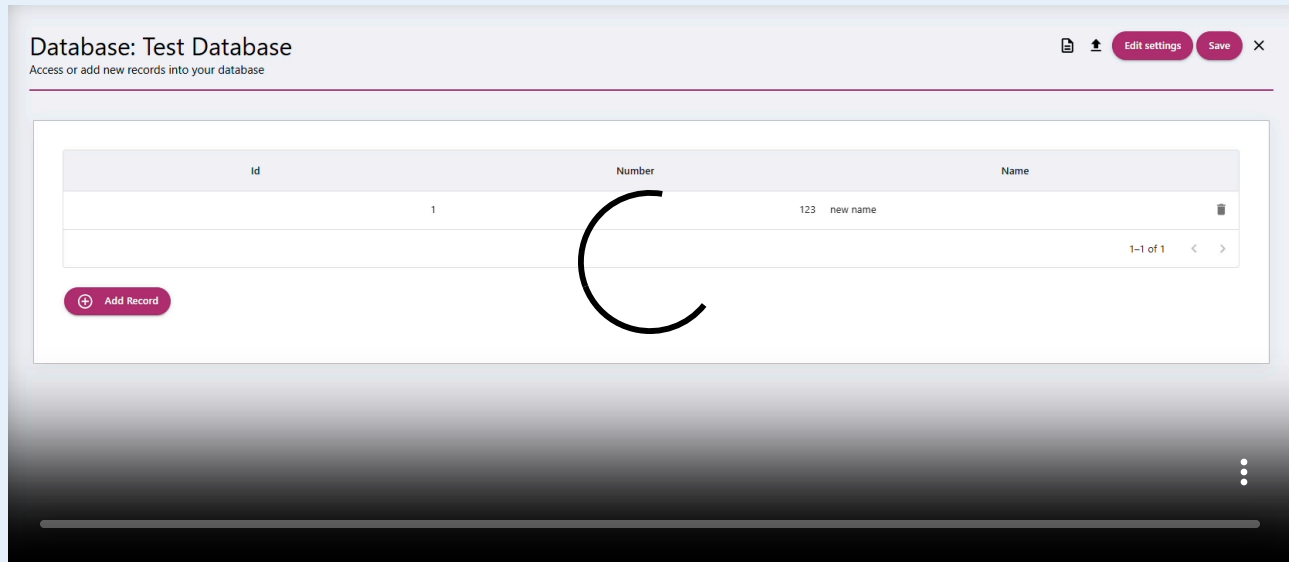
since [when setting up db interaction from form field \(trigger\) > output](#) fails to update ID field (even when set to editable in task) use this flow

### HOW THIS WORKS

#### if new record

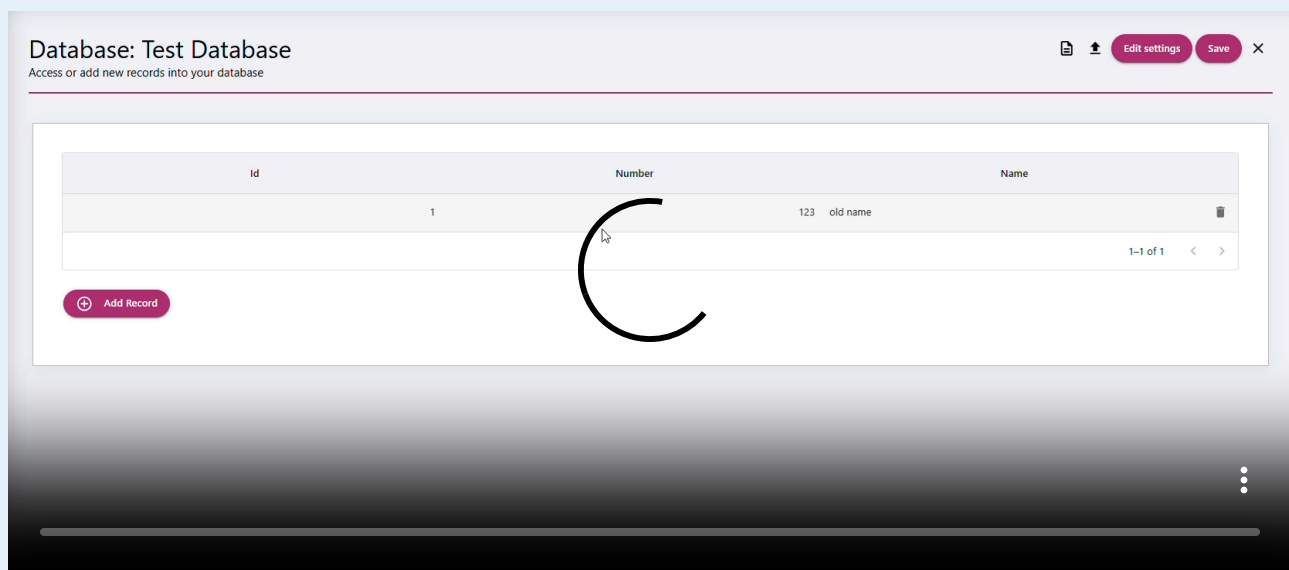
if unique identifier field is not found in db [fetch db id \(if exists\)](#)  
then [and populate db ID form field](#) does not occur hence blank field  
and [add / edit record \(depending on if db record id exist\)](#) adds record to db since no id found

and [populate db ID field in form](#) with newly created db id  
which can then be used to edit record in [edit record based on db id](#)



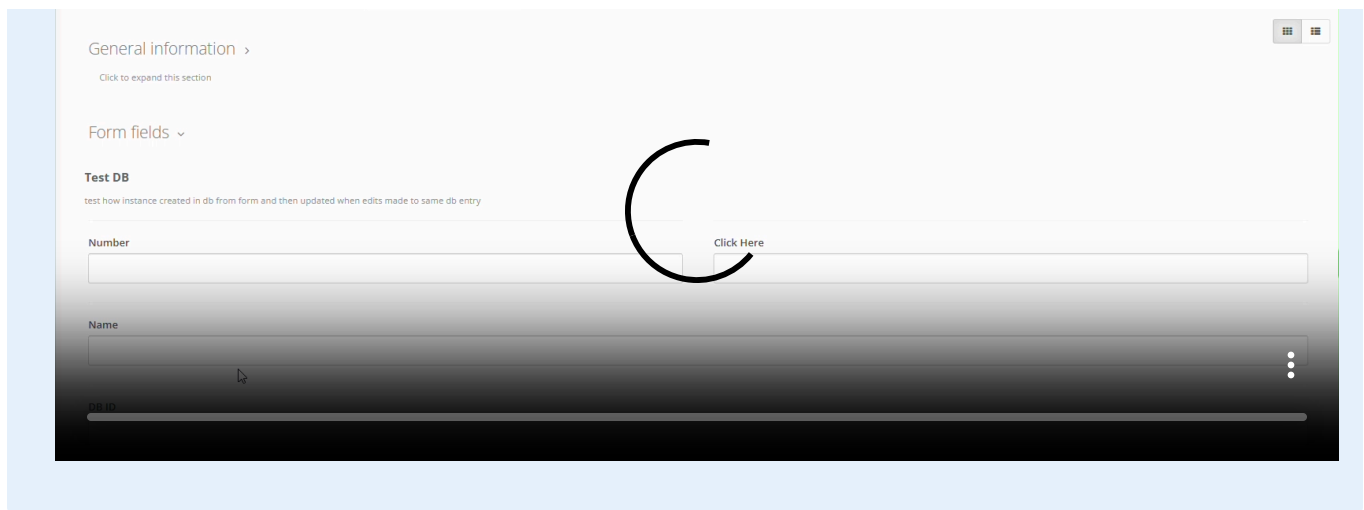
## if previous record

unique identifier found in [fetch db id \(if exists\)](#)  
therefore db id field populated from [and populate db ID form field](#)  
which can then edit record in [add to / edit record in db](#) instead of adding new (but  
assuming no fields changed essentially does nothing)  
so that changes can be made at same location as with case where no record found in [edit  
record based on db id](#)



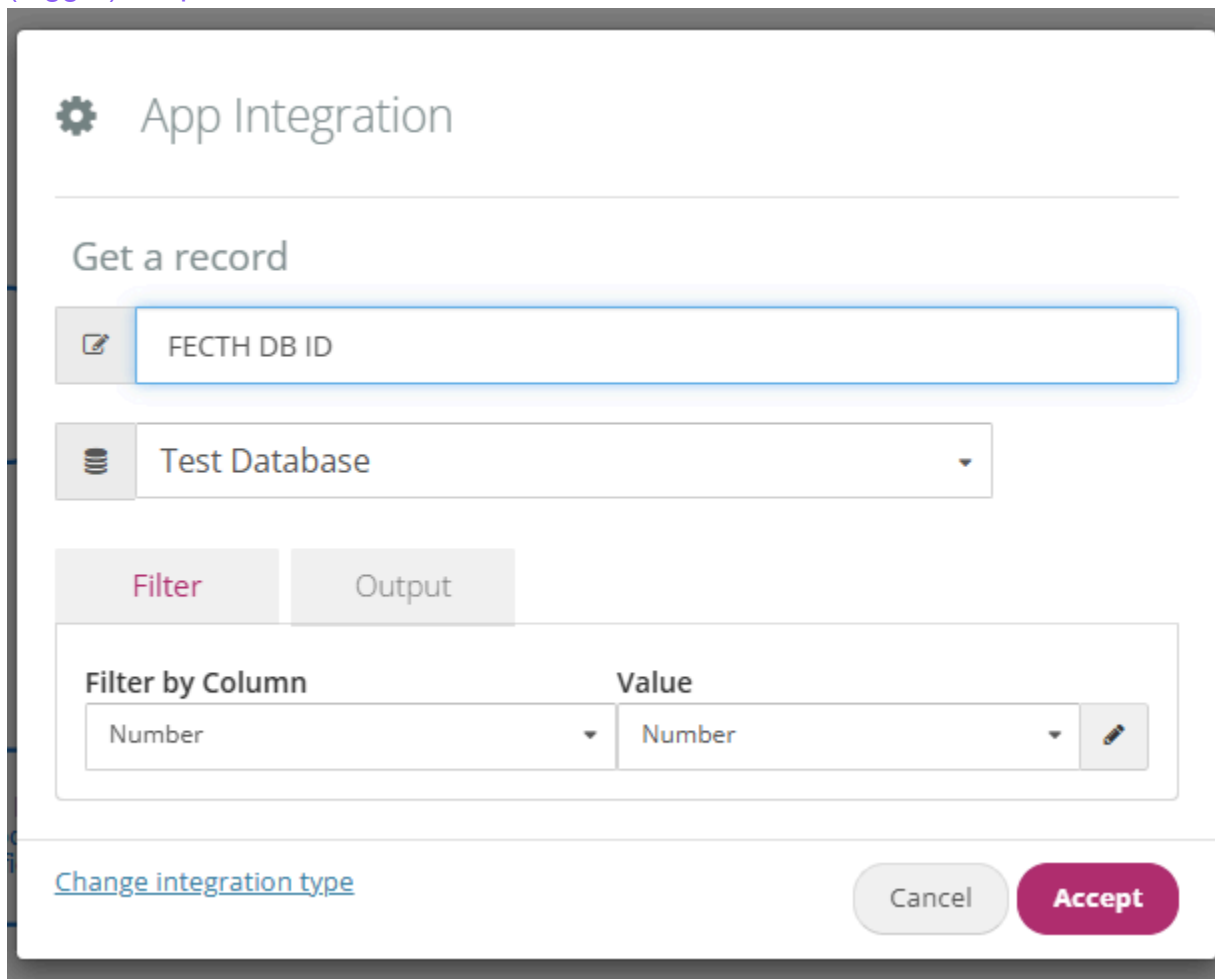
## NOTICE

works (updates id ID field) even if field used as unique identifier null



## fetch db id (if exists)

NB use same field as "unique identifier" in [when setting up db interaction from form field \(trigger\) > input](#)



and populate db ID form field





## App Integration

### Get a record



FECTH DB ID



Test Database

Filter

Output

Filter by Column

Value

Number

Number



[Change integration type](#)

Cancel

Accept



## App Integration

### Get a record



FECTH DB ID



Test Database

Filter

Output

Output

Target Field

Id



DB ID



Click here to add a parameter...

[Change integration type](#)

Cancel

Accept

**add / edit record (depending on if db record id exist)**

## App Integration

### Edit a record



EDIT / ADD TO DB






Test Database

Input

Output

Target Column

Form Field

- Id -	DB ID	
Name	Name	 
Number	Number	 

Click here to add a parameter...

☒ Insert record if it does not exist

[Change integration type](#)

Cancel

Accept

populate db ID field in form



## App Integration

### Get a record



FECTH DB ID



Test Database

Filter

Output

Filter by Column

Value

Number



Number



[Change integration type](#)

Cancel

Accept

## App Integration

Get a record



FECTH DB ID



Test Database

Filter

Output

Output

Target Field

Id



DB ID



Click here to add a parameter...

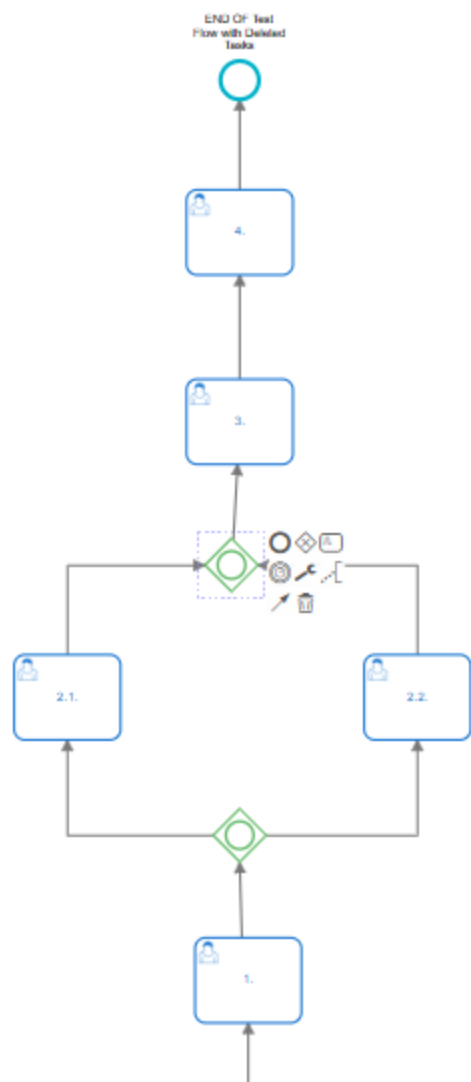
[Change integration type](#)

Cancel

Accept

**info on how system behaves when task in flow deleted**

**before**



**after**

NOTICE gateways also removed



### tasks prior to alteration

tasks in 1. continued with *updated* flow ( --> 2.1. --> 3.)

hence

**previously created tasks follow newest flow**

### instances existing in deleted task

tasks in 2.2. (ie. tasks 1. and 2.1. completed) remain in inbox and continue with *previous* flow

**since parallel task (2.1.) already completed and waiting at inclusive gateway**

therefore

deletion of parallel flow (inclusive gateway) will not cause error in flow  
even if existing (in use) tasks removed

### instances existing in parallel to deleted task

tasks in 2.1. (ie. tasks 1. and 2.2. completed) remain in inbox and continue *updated* flow  
(no longer requiring parallel tasks 2.2. to be completed before progressing to tasks 3.)

# info on how system behaves with auto-completed tasks ito gateways

links closely to [info on how system behaves with new form field used in gateway](#)

when tasks auto-completed values in fields at last update "saved" as if task completed  
ie. values set / updated in tasks but not submitted will pull through to rest of process upon auto-completing

## WARNING

can be problematic if user alters a field value (eg. drop down) which is later used for gateway condition without updating other fields that may be used in this flow

EXAMPLE:

require user to complete a date field and then update dropdown to "dates specified" so that flow can skip a later task where this to be completed

how this fails:

user updates the dropdown but does not specify a date

the tasks is then not re-initialized later on

and date cannot be set for this instance

## SOLUTIONS

NOTICE

should be used exclusively

**use script to set fields required based on gateway-used field value**

```
function setRequired() {  
    var option = Flokzu.getFieldValue([[Dropdown]]);  
  
    if (option) {  
        if (option === "Values Updated") {  
            Flokzu.setRequired([[Value 1]]);  
            Flokzu.setRequired([[Value 2]]);  
        }  
    }  
}  
  
Flokzu.onChange([[Dropdown]], setRequired);
```

TIP

format document so that "Dropdown" is **above** all other fields



so that user updates this field first which then determines field visibility of those below

#### WARNING

tasks completed on timer can do so even if required fields are empty

### use script to revert gateway-used field value as desired if required fields not updated

```
function forceValue() {  
    var v1 = Flokzu.getFieldValue([[Value 1]]);  
    var v2 = Flokzu.getFieldValue([[Value 2]]);  
    var option = Flokzu.getFieldValue([[Dropdown]]);  
  
    // Check if either is empty, null, or undefined  
    if (!v1 || !v2) {  
        // Only reset if the status is not already "Values Not Updated"  
        if (statusField !== "Values Not Updated") {  
            Flokzu.setFieldValue([[Dropdown]], "Values Not Updated");  
            Flokzu.log("Please add the Value 1 and Value 2 fields before  
altering this dropdown");  
        }  
    }  
}  
  
Flokzu.onChange([[Dropdown]], forceValue);
```

#### TIP

format document so that "Dropdown" is **below** all other fields

so that user attempts to update this field last (and unable to do so if required fields not populated)

#### NB

explain in field description

eg. "Please update xyz before updating this field value"

#### WARNING

task with required field autocomplete if still blank

## info on how system behaves with new form field used in gateway

{tested for tasks in inbox and at timers}

able to update gateway conditions to use new form field for all instances existing before this gateway

but should not delete field from form previously used

as soon as process is updated (to include new field) this field will be present in previously existing instances as well and can therefore be used in gateways

BUT

CRITICAL TO

set default value which is used to direct flow at gateway to flow in which tasks appears where this new field can be updated and "default flow" expected

WARNING

if no condition in one of the exclusive gateway flows then system followed that path even when condition of other flow met

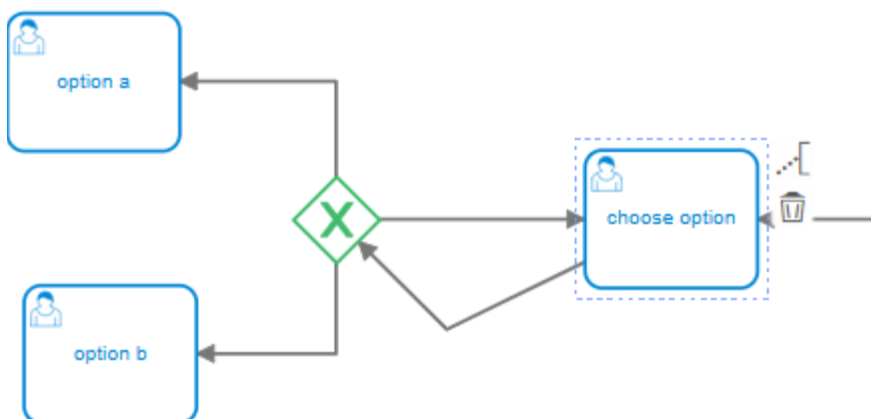
NOTICE

not always the case

able to follow flow where condition met and only if not met follow no-condition flow when exclusive gateway linear



but fails with recursive loops



## info on how system handles change in field name

{tested for tasks in inbox and at timers}

## WARNING

have to manually update the scripts

## NOTE

although field name does not update for instances in timer

as soon as moves out of this field name altered and should be referenced to as new field name in communication eg. {{Updated Field Name}}

if old file name used then section of email will be blank