README - Flokzu in General

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 - ito 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)

tip for during staggered deployment (with mutiple 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

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

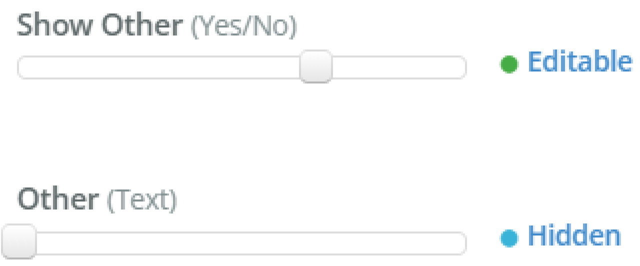
reason being

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

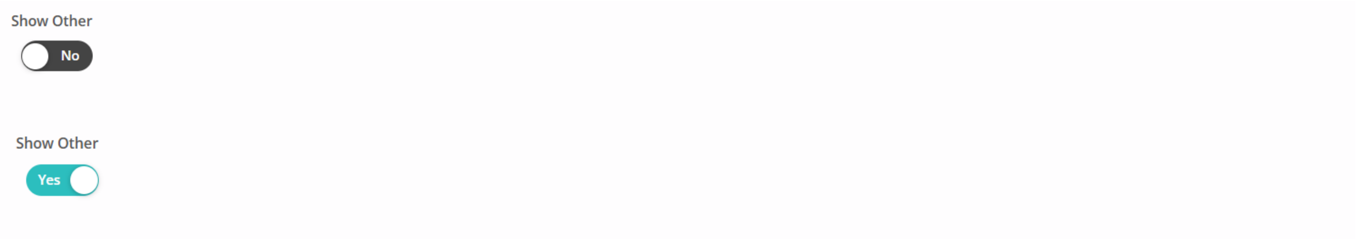
Other (Text) ● Hidden

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

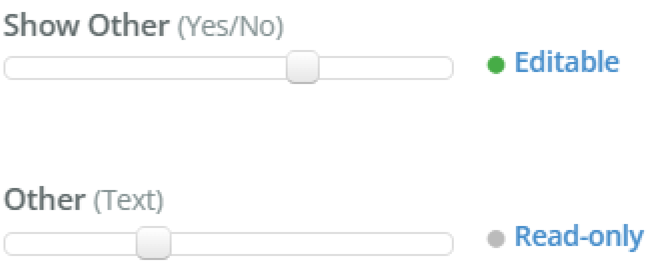
No

Show Other

Yes

field read-only at task and required with script

at given task



Show Other (Yes/No) ● Editable

Other (Text) ● Read-only

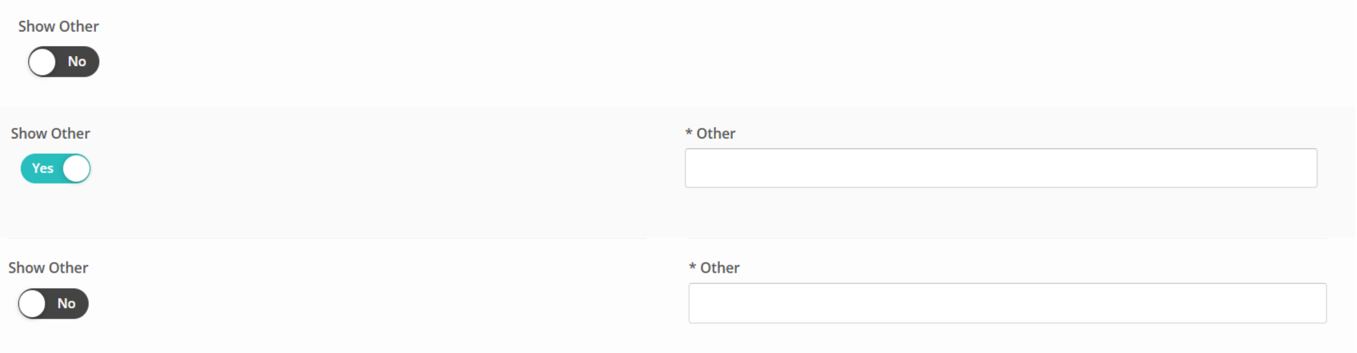
field set to read-only

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

No

Show Other

Yes

* Other

Show Other

No

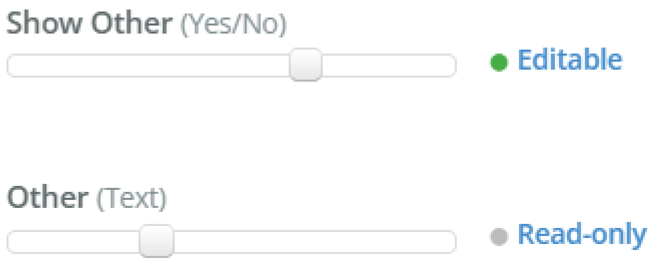
* Other

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



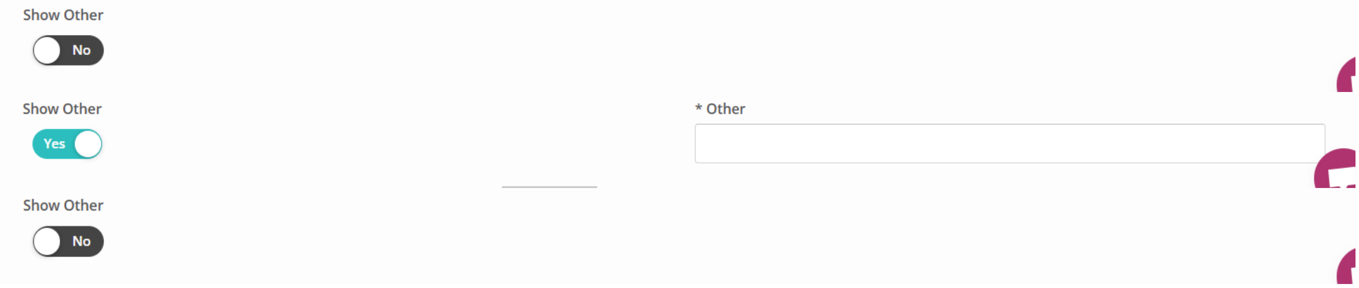
Show Other (Yes/No) ● Editable

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 + '">Nanme 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);
```

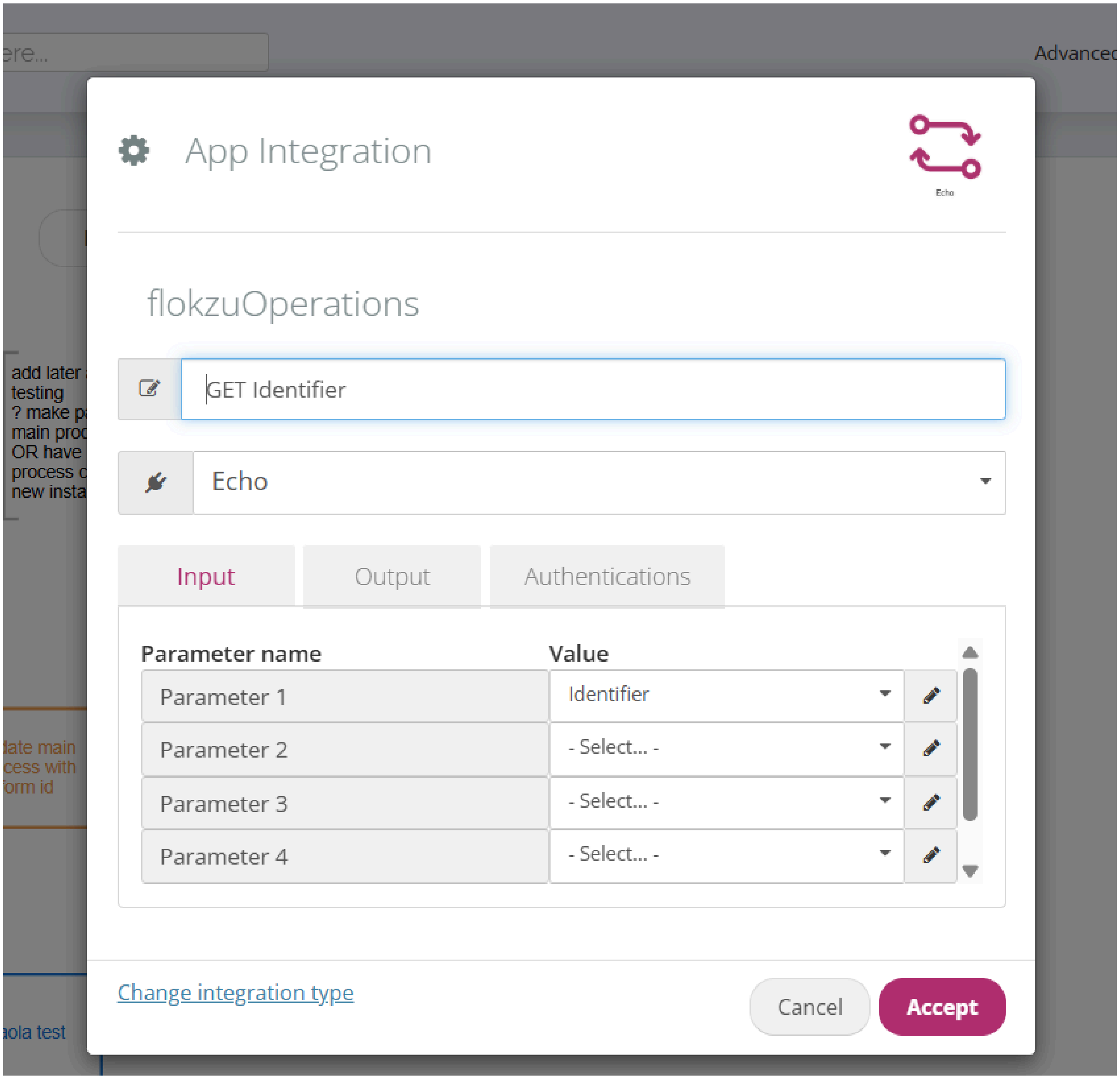
in external form

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



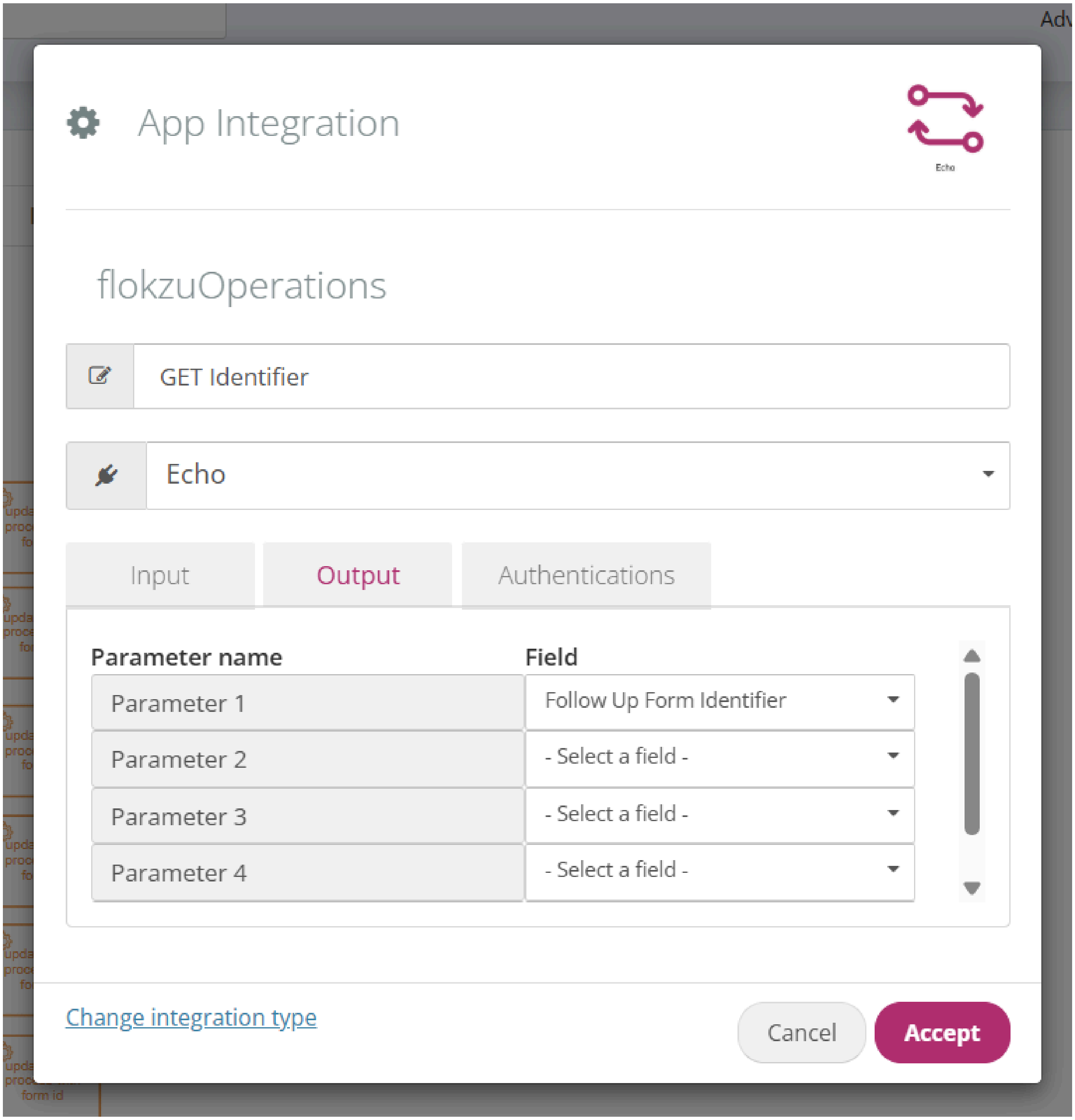
App Integration

flokzuOperations

GET Identifier

Echo

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



App Integration

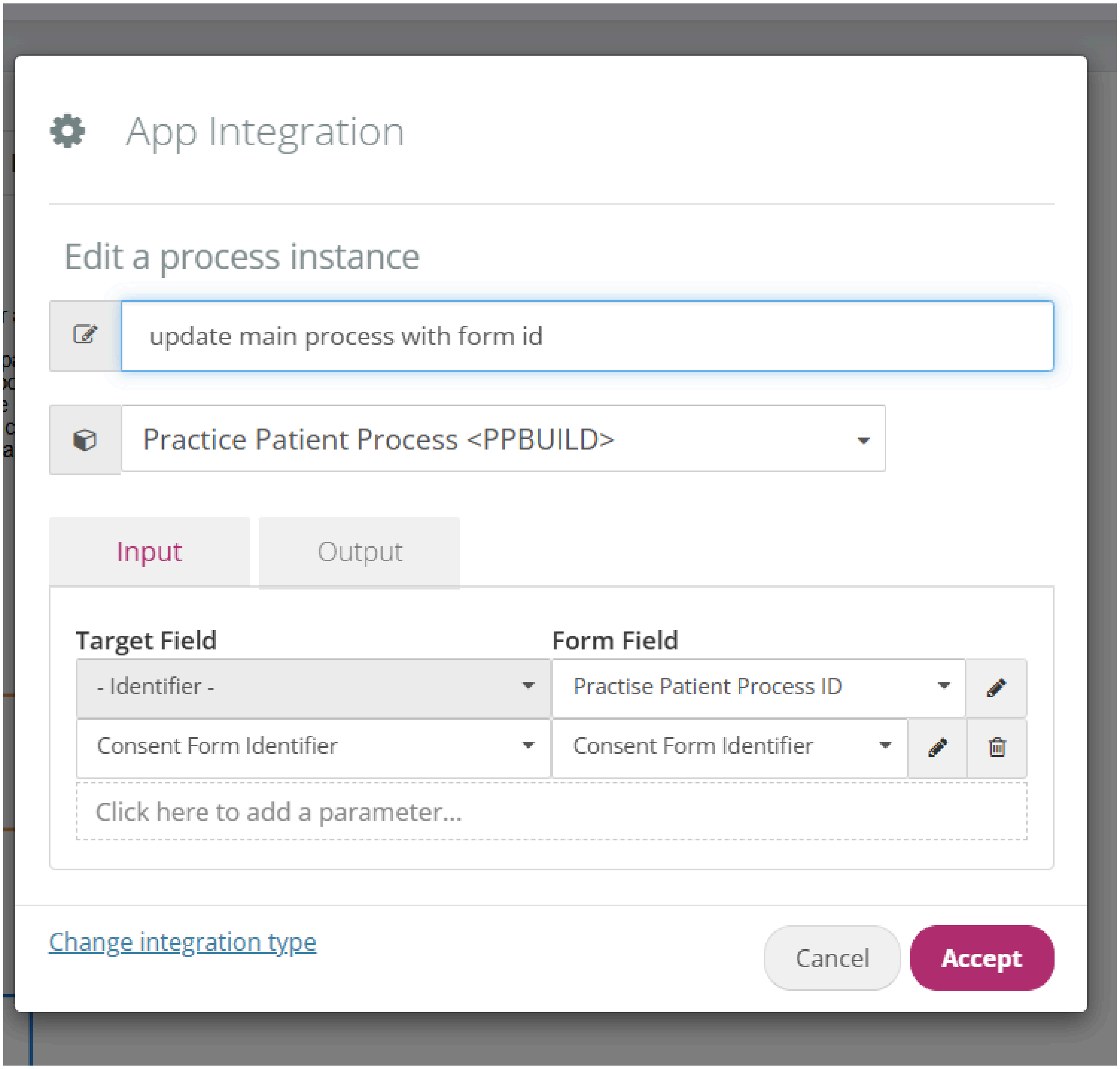
flokzuOperations

GET Identifier

Echo

Parameter name	Field
Parameter 1	Follow Up Form Identifier
Parameter 2	- Select a field -
Parameter 3	- Select a field -
Parameter 4	- Select a field -

7. then update main process



App Integration

Edit a process instance

update main process with form id

Practice Patient Process <PPBUILD>

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

Click here to add a parameter...

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

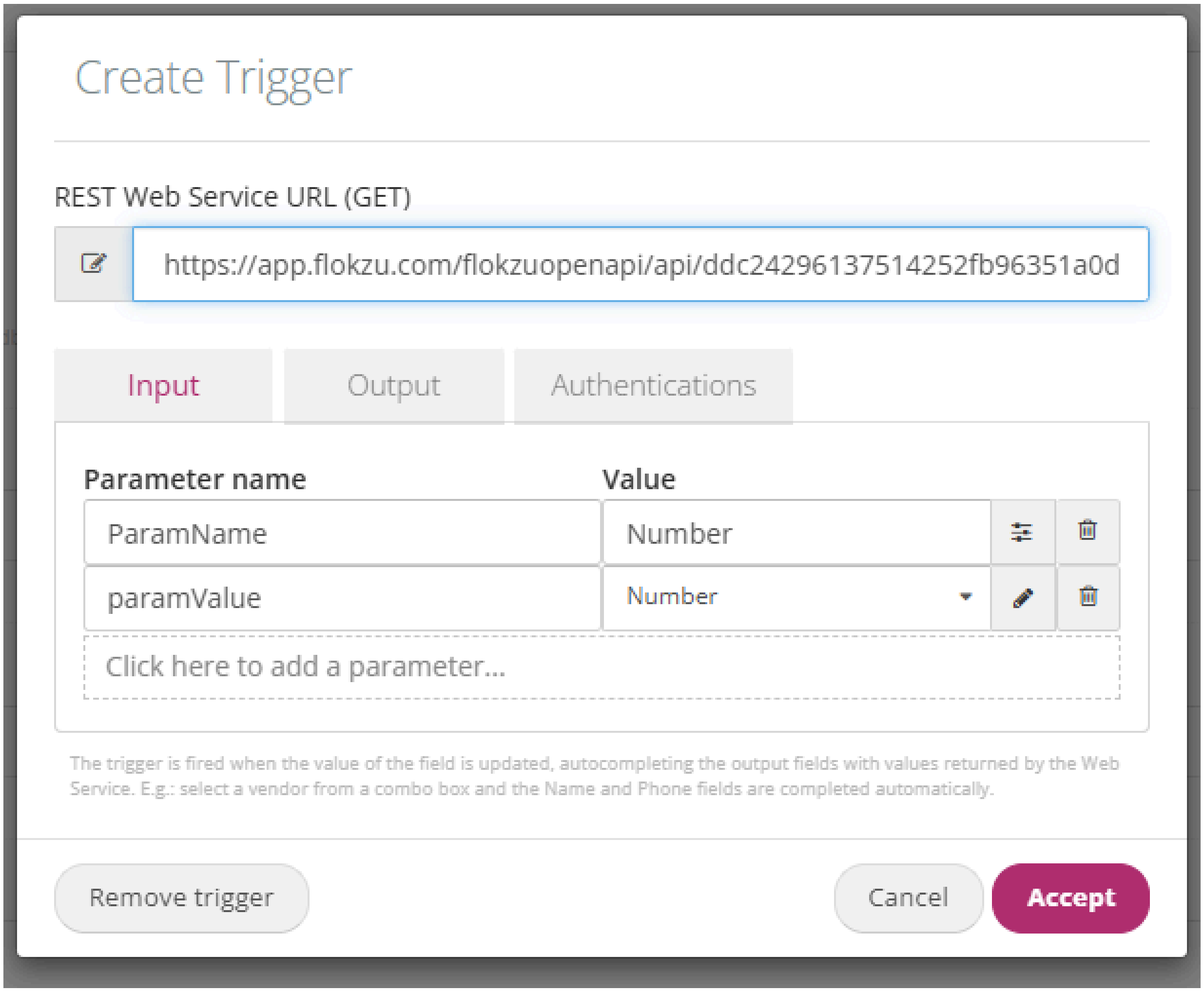
fields updated from database

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

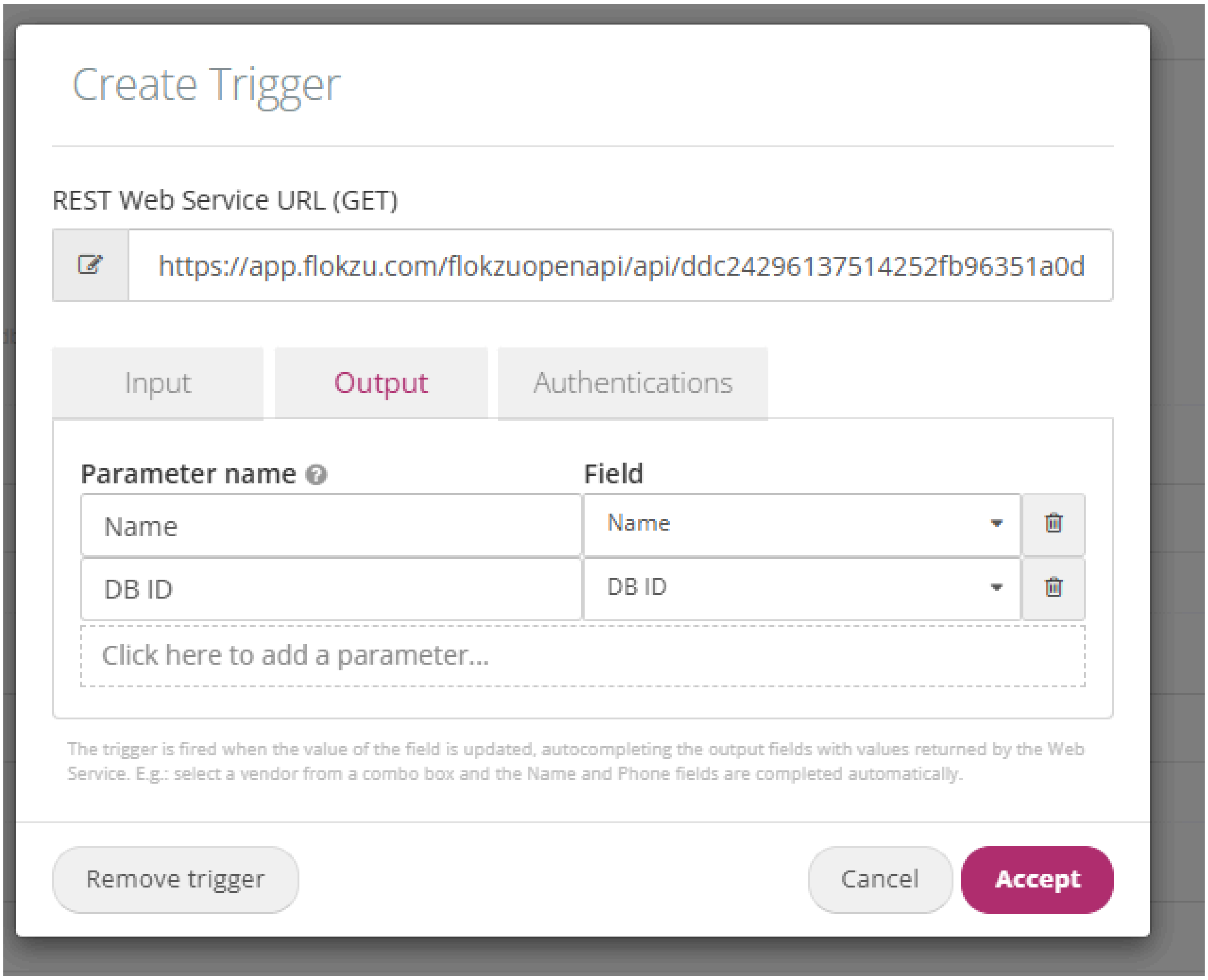
Parameter name	Value
ParamName	Number
paramValue	Number

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.

set up in field "Number"

output

how to populate fields



Create Trigger

REST Web Service URL (GET)

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

Parameter name	Field
Name	Name
DB ID	DB ID

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.

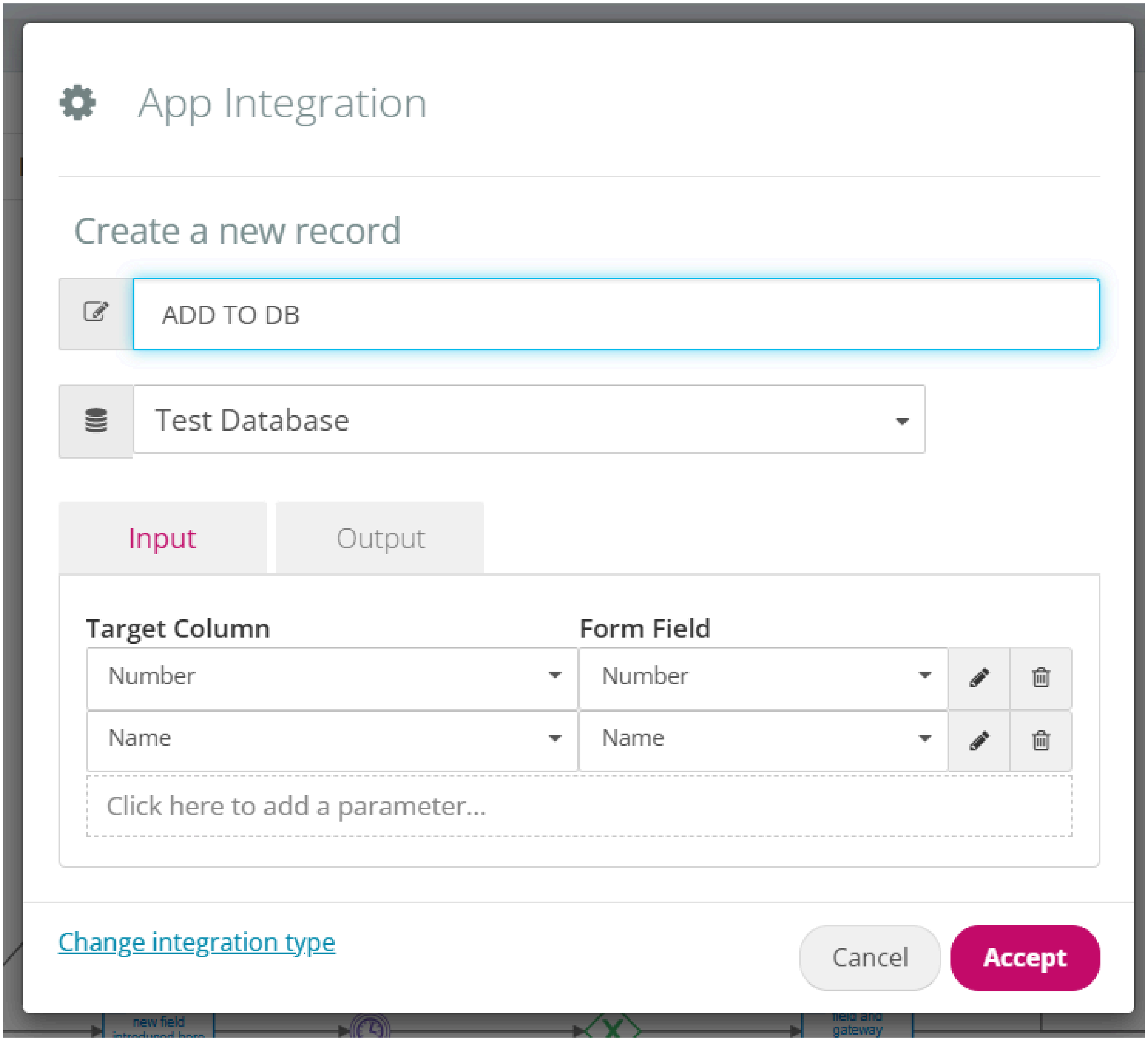
NB **Parameter name** should match db column name **exactly**

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

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

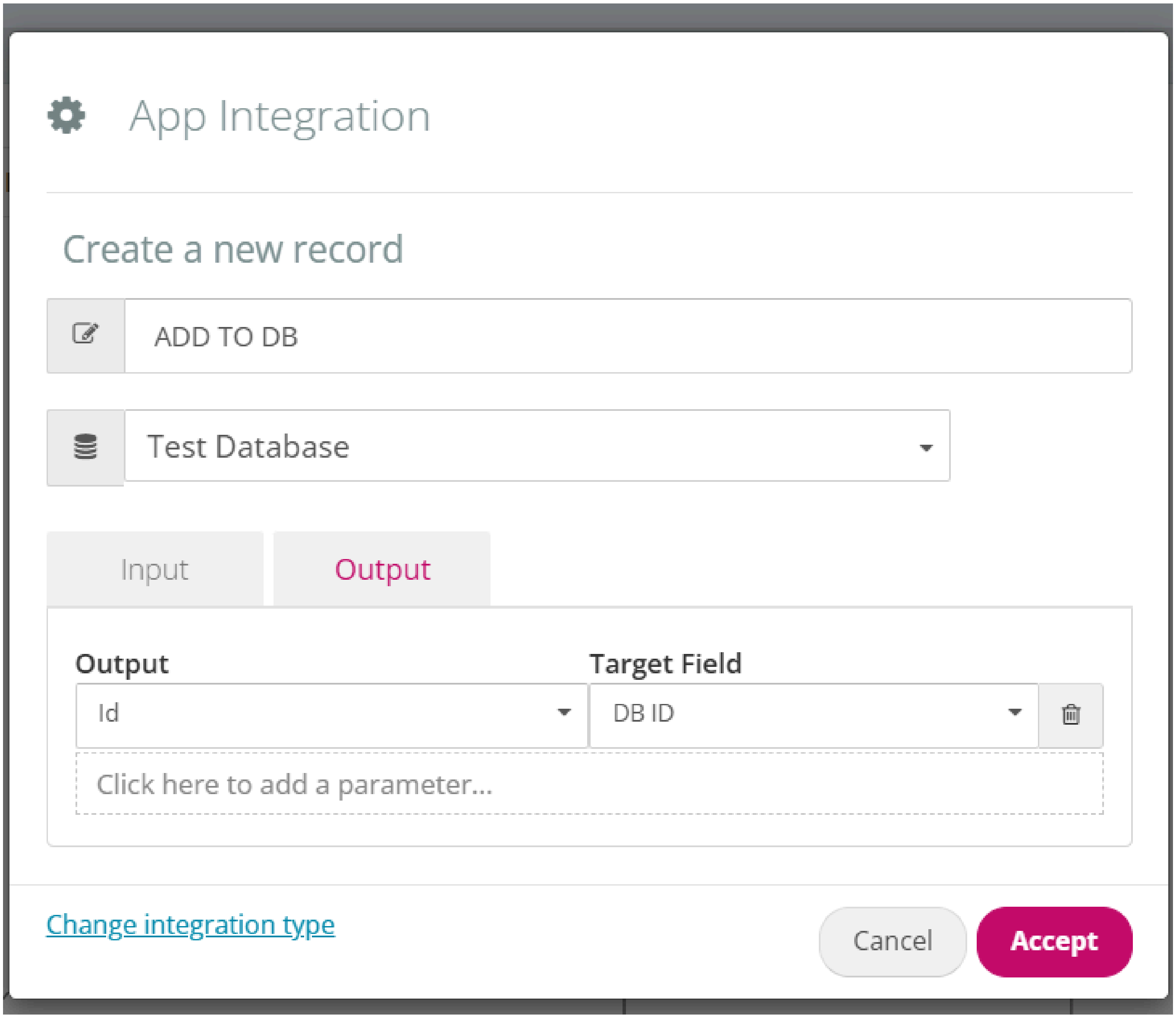
ADD TO DB

Test Database

Target Column	Form Field
Number	Number
Name	Name

and return db id to form

field can be set hidden



App Integration

Create a new record

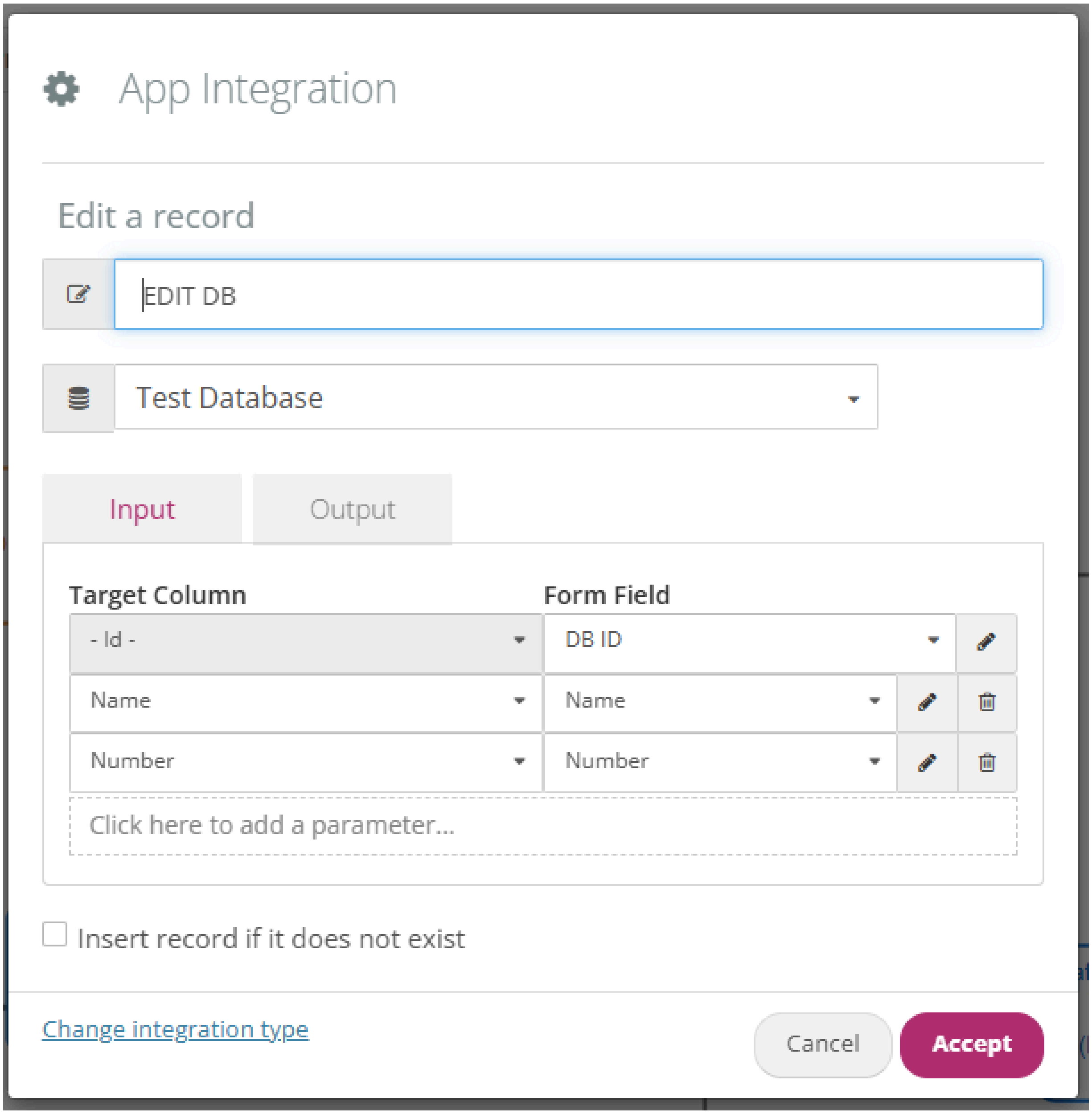
ADD TO DB

Test Database

Output	Target Field
Id	DB ID

edit record based on db id

based on and return db id to form



Edit a record

EDIT DB

Test Database

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

□ Insert record if it does not exist

add to / edit record in db

since when setting up db interaction from form field (trigger) > output fails to update ID field (even when et 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

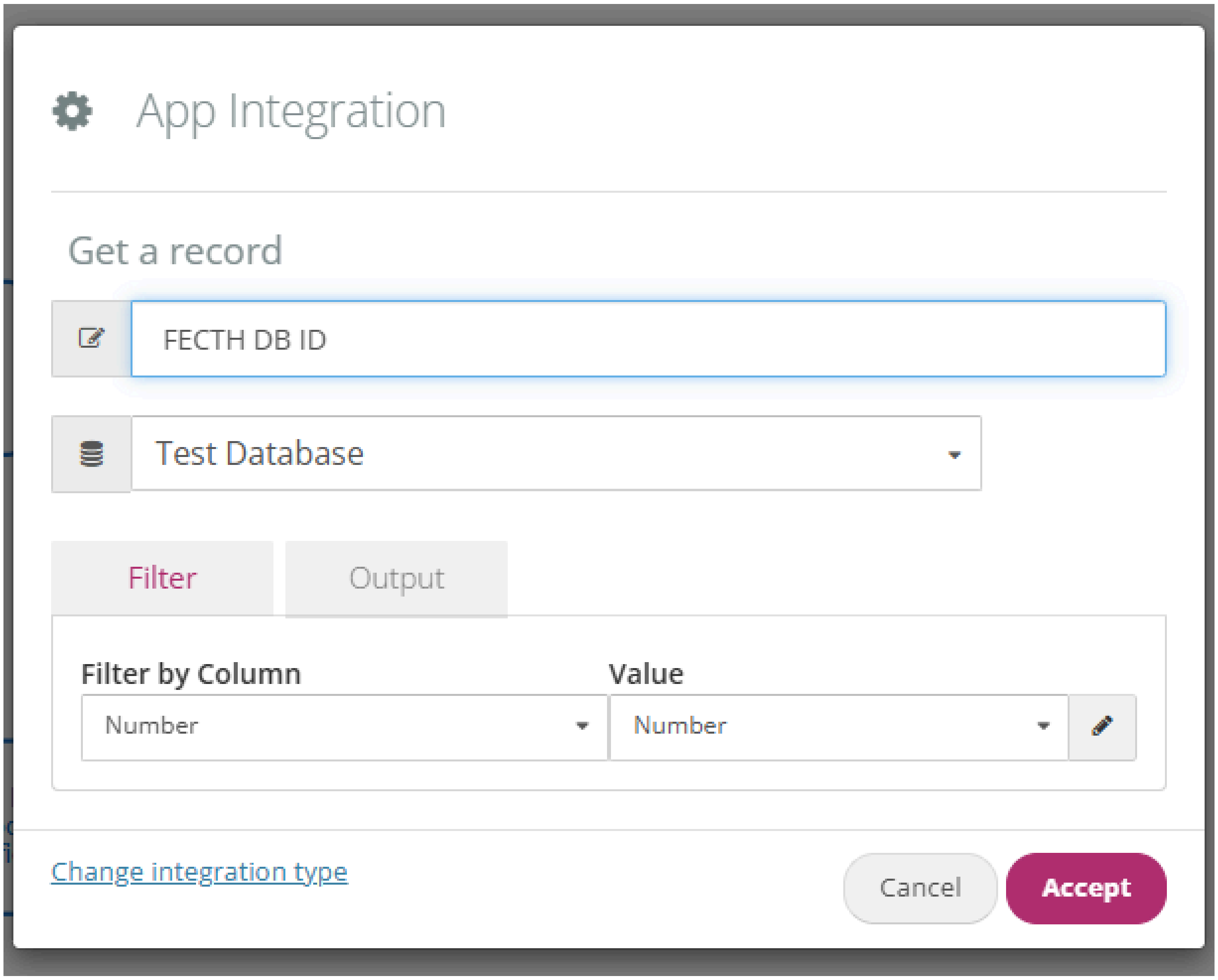
unique identifier found in fetch db id (if exists)
therefore db id field populated from and populate db ID form field
which can then edit record in add to / edit record in db instead of adding new (but assuming no fields changed essentially does nothing)
so that changes can be made at same location as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



App Integration

Get a record

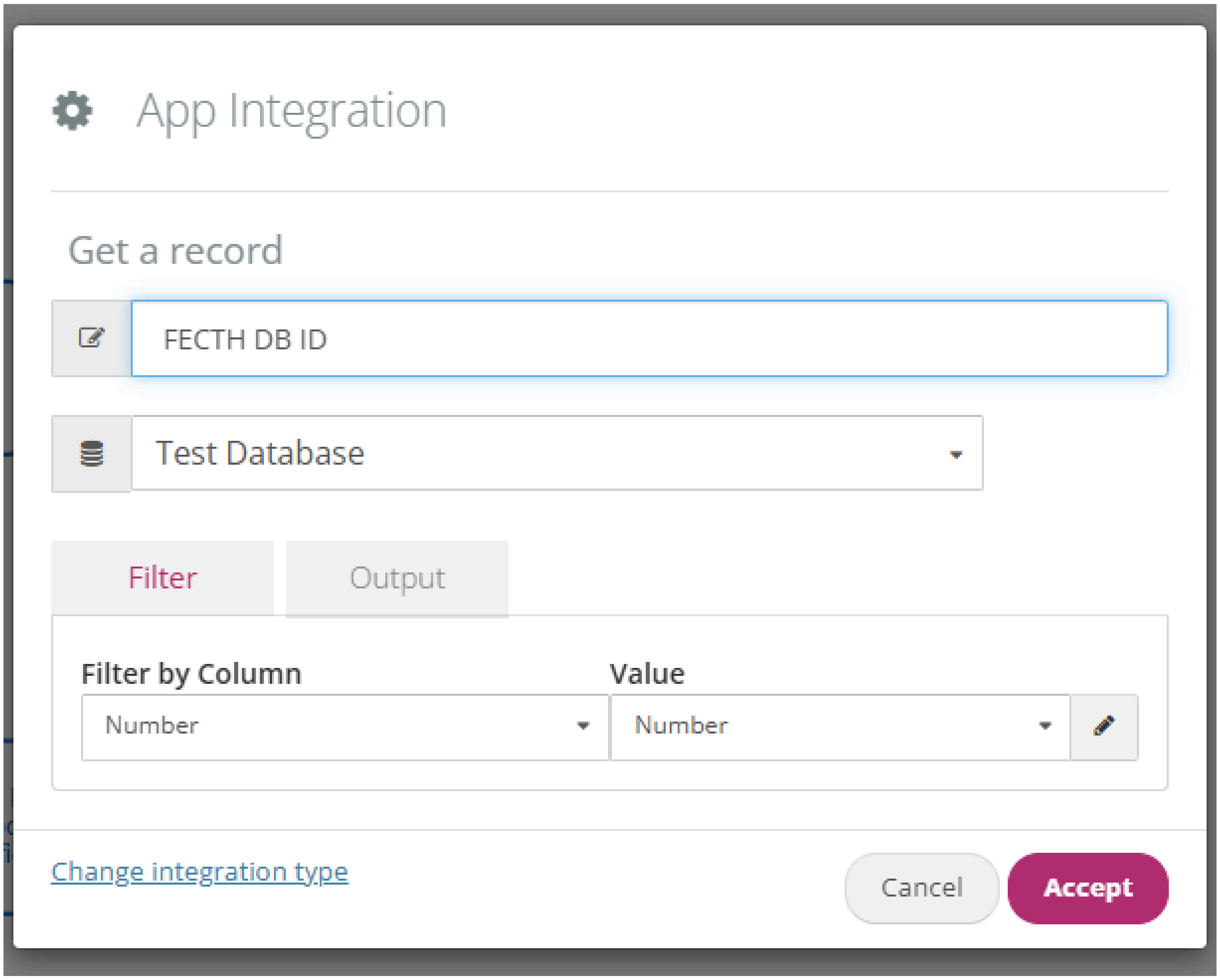
FECTH DB ID

Test Database

Filter by Column: Number

Value: Number

and populate db ID form field



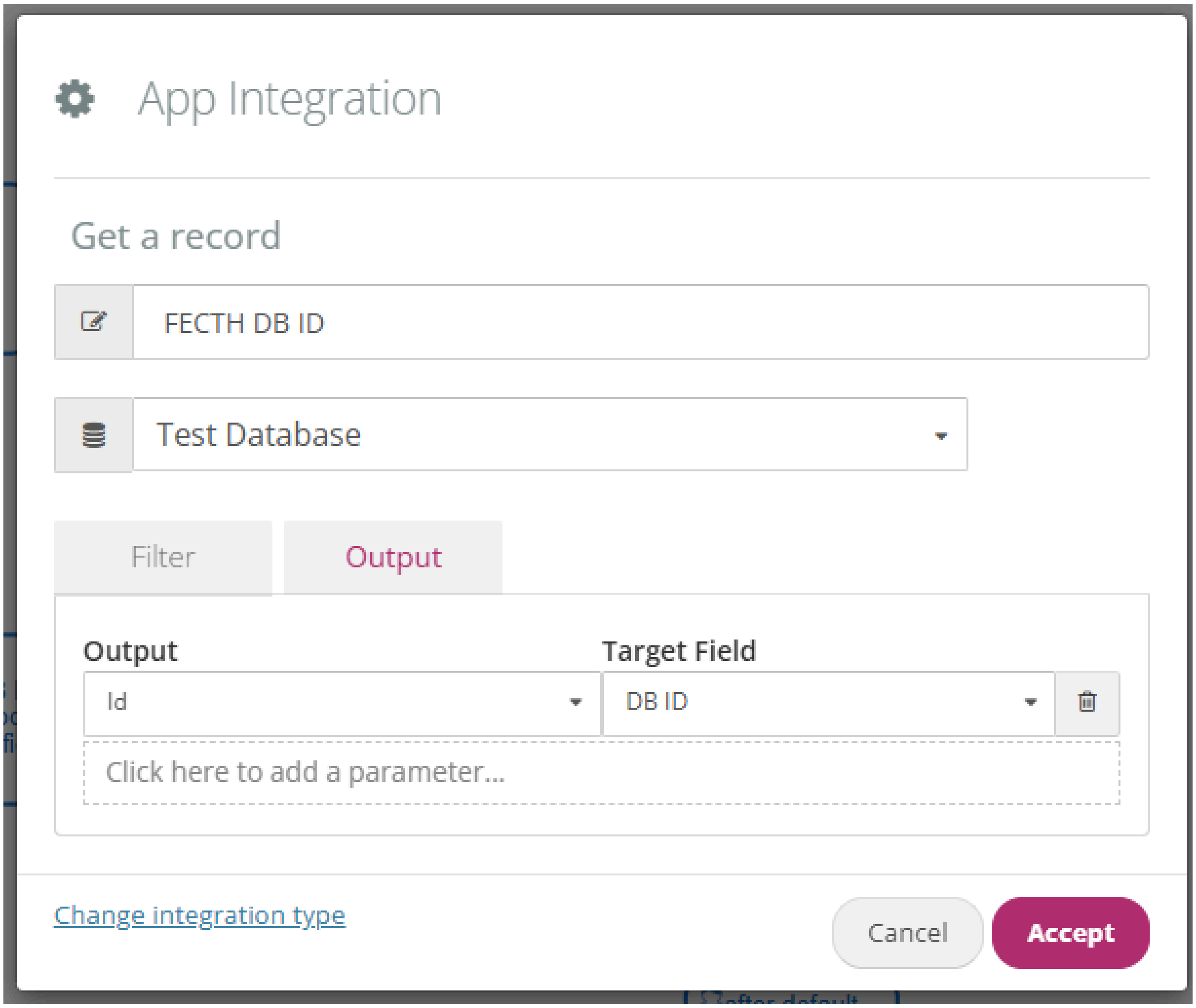
Get a record

FECTH DB ID

Test Database

Filter by Column: Number

Value: Number



App Integration

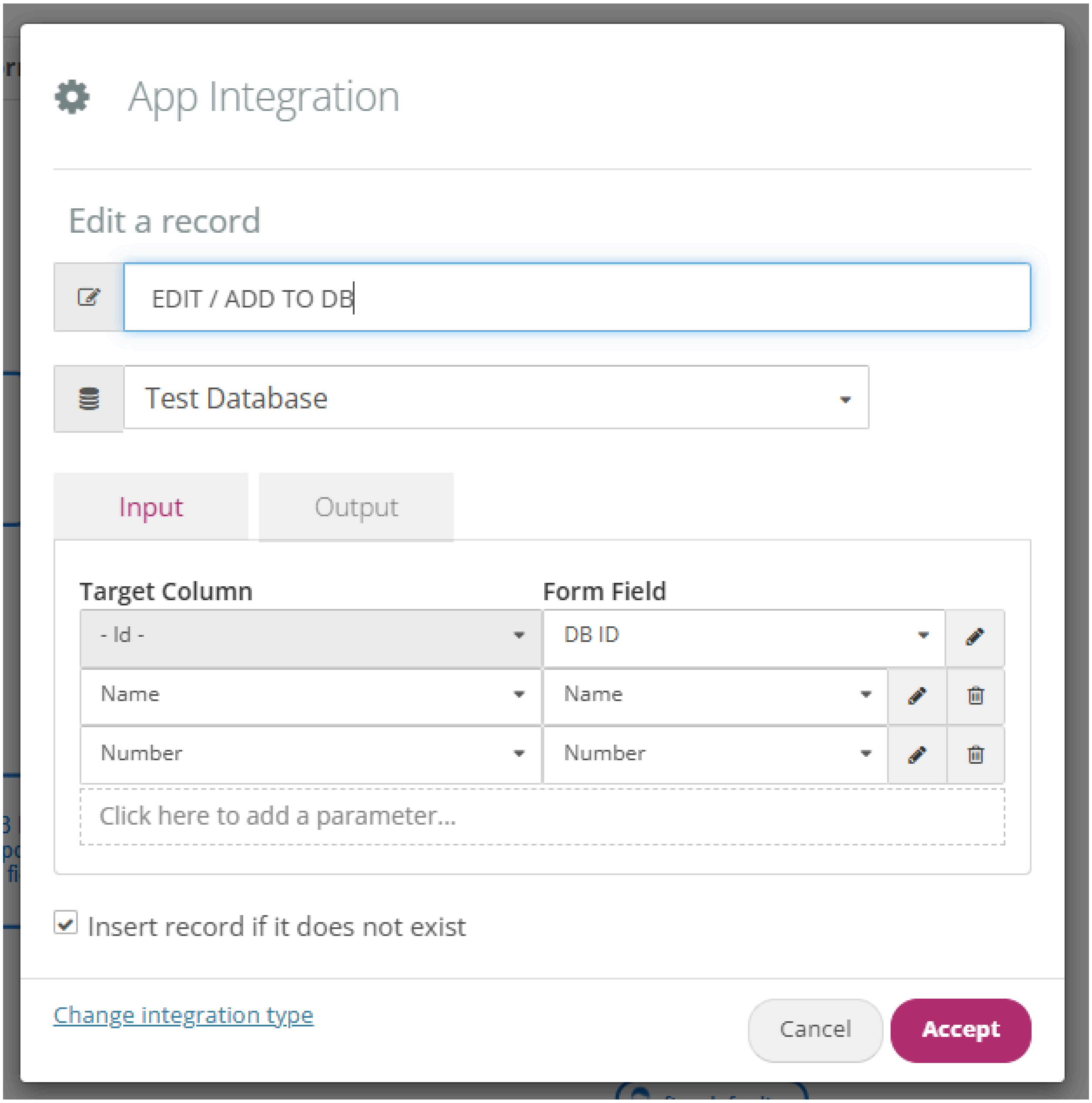
Get a record

FECTH DB ID

Test Database

Output	Target Field
Id	DB ID

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



App Integration

Edit a record

EDIT / ADD TO DB

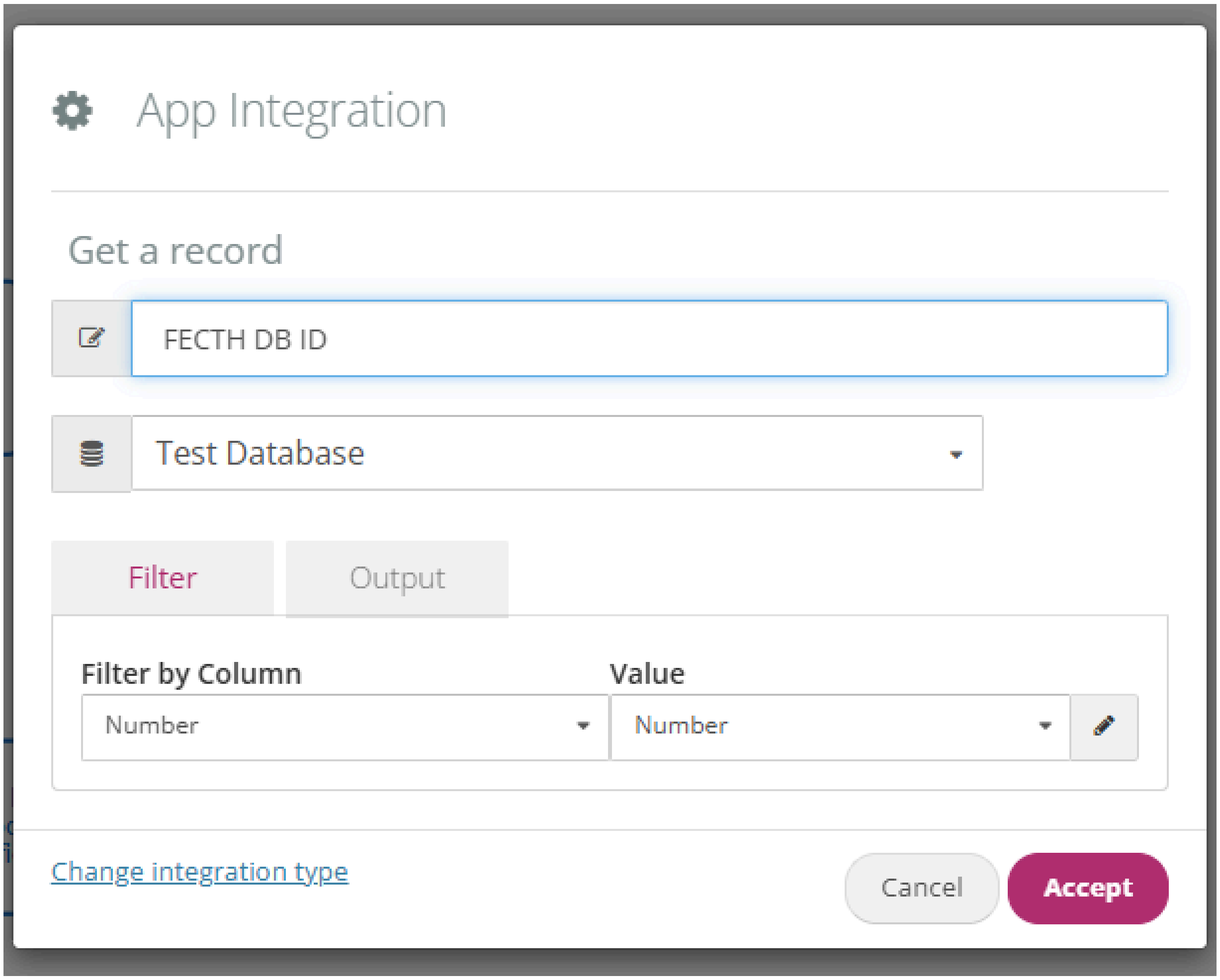
Test Database

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

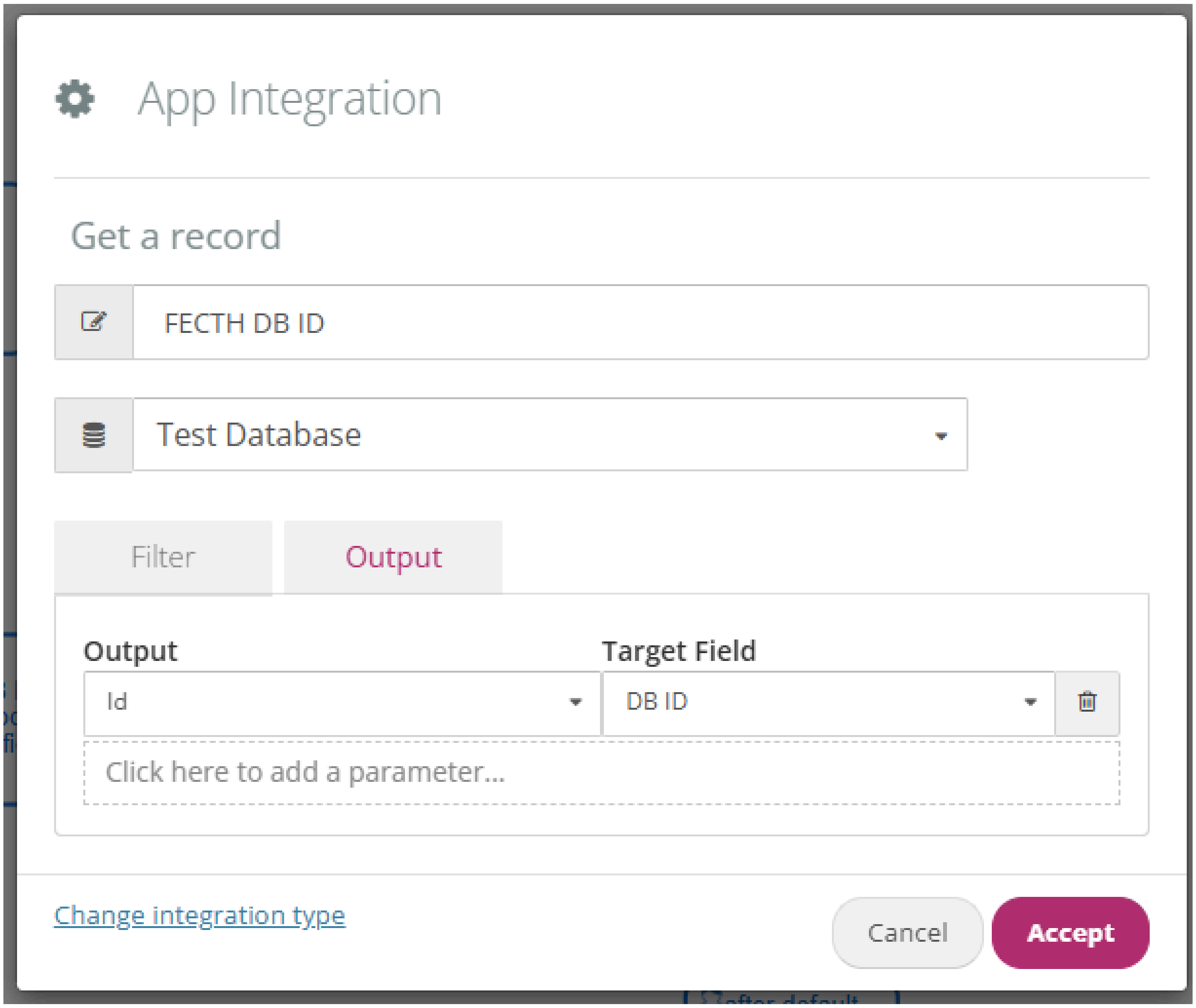
Click here to add a parameter...

☑ Insert record if it does not exist

populate db ID field in form



App Integration
Get a record
FECTH DB ID
Test Database
Filter
Output
Filter by Column
Number
Value
Number
Change integration type
Cancel
Accept



App Integration

Get a record

FECTH DB ID

Test Database

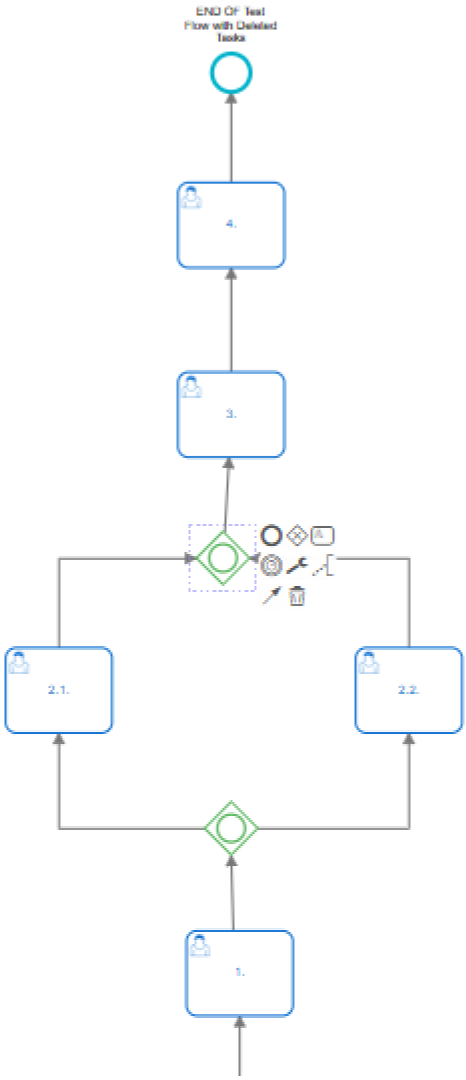
Filter | Output

Output	Target Field
Id	DB ID

Click here to add a parameter...

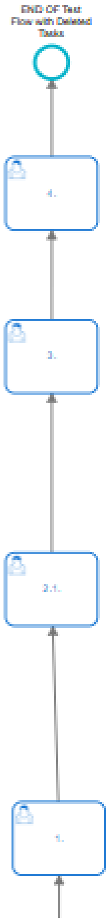
info on how system behaves when task in flow deleted

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 loner 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 || !v1) {
        // 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

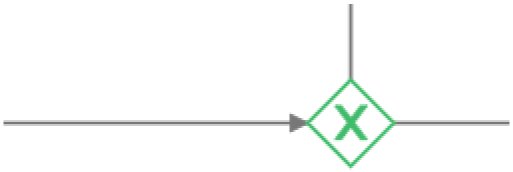
{tested for tasks in inbox and at timers}

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

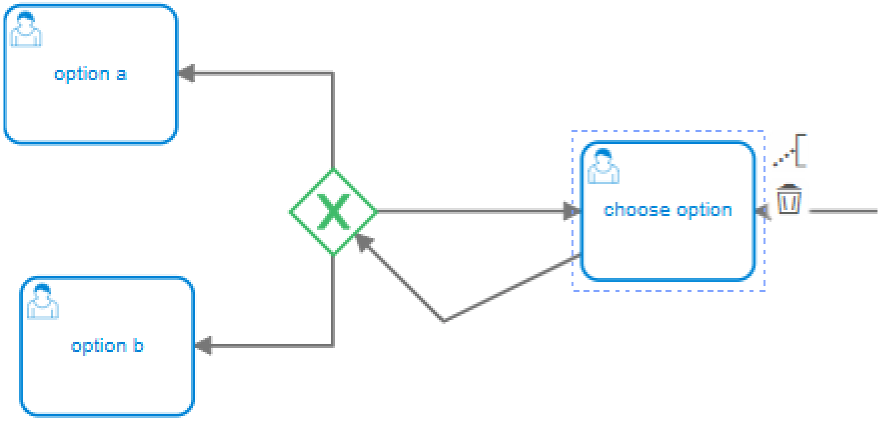
as soon as process is updated (to include new field) this field will be present in previously existing instances as well and can therefore be used in gateways
BUT
CRITICAL TO
set default value which is used to direct flow at gateway to flow in which tasks appears where this new field can be updated and "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