## Merge 2+ processes into 1 datalist inbox [Multiapproval application]

## Problem

Using multiapproval [Multiple Approval v2 (Thread safe)] while having forms in both parent and child process. You have 2 different processes while subprocess approve doesnt contain any row in database, so it can't be linked with datalist inbox only with inbox as in example, which takes data only from SHKAssignmentsTable, without any data from forms.

## Motivation

You can simply use INBOX in userview, but this gives absolutely no info to users, I wanted to give them all relevant informations which were provided in apply, while retain opportunity to run actions for both processes from one datalist.

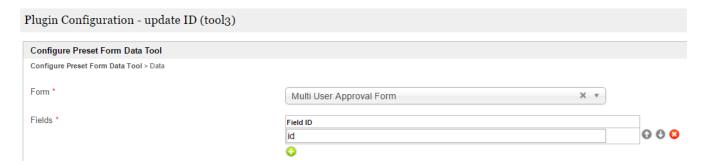
## Solution

#### 1.Create row in DB

Create new tool in process Apply



Using Preset Form Data Tool set ID for Approval Form, which leads to creating row in table with correct process ID (which datalist inbox uses for pairing with assignments through SHKAssignmentsTable ). Into field ID we assign #assignment.processId#, for Approval Form.



# Plugin Configuration - update ID (tool3)



#### 2. Store Child ID's

In main Process (Apply) in form Apply add hidden field childIDs so JW creates this column in table.

Add following lines into Generate Approvals Tool. This will save all child process ID's into childIDs column so we can have reference for datalist inbox.

```
Connection con = null;
try {
   Class.forName("com.mysql.jdbc.Driver").newInstance();
   //////////");
   if (!con.isClosed()) {
      String sql = "UPDATE jwdb.app_fd_multiApproval_applications SET c_childIDs = ? WHERE id = ?";
      PreparedStatement stmt = con.prepareStatement(sql);
      String concated = approvalInstanceIds.substring(0, approvalInstanceIds.length() - 1); //cut out last ","
      stmt.setString(1, concated);
      stmt.setString(2, "#assignment.processId#");
      stmt.execute();
   }
} catch (Exception ex) {
   System.err.println("Exception: " + ex.getMessage());
} finally {
   try {
      if (con != null)
          con.close();
   } catch (SQLException e) {
      System.err.println("Exception: " + ex.getMessage());
}
```

## 3. Create Datalist Inbox

data binder: JDBC

Select Binder
Select Binder > Select Source of Data (Binder) (JDBC Datalist Database Binder)

Select Source of Data (Binder)

JDBC Datalist Database Binder

setup connection to JWDB

```
Configure JDBC Datalist Binder
Select Binder > Configure JDBC Datalist Binder
Datasource
                                                                                 Custom Datasource
Custom JDBC Driver *
                                                                                com.mysql.jdbc.Driver
Custom JDBC URL *
                                                                                jdbc:mysql://localhost/jwdb?characterEncoding=UTF8
Custom JDBC Username *
                                                                                root
Custom JDBC Password
                                                                                ......
SQL SELECT Query *
                                                                                   1 select
                                                                                            jwdb.app_fd_multi_user.id,NR.dateCreated,
                                                                                          (select 1 n union all
                                                                                           select 2 union all select 3 union all
select 4 union all select 5) numbers INNEF
                                                                                         on CHAR_LENGTH(NR.c_childIDs)
                                                                                              -CHAR_LENGTH(REPLACE(NR.c_childIDs, ',',
                                                                                   9 JOIN jwdb.app_fd_multi_user
10 ON SUBSTRING_INDEX(SUBSTRING_INDEX(NR.c_child)
                                                                                        where c_childIDs != '' and NR.c_requester is
                                                                                   12
                                                                                        UNTON
                                                                                   13
                                                                                        select
                                                                                           id, dateCreated, dateModified,c_value, c_r
                                                                                        from jwdb.app_fd_new_request
                                                                                        where jwdb.app_fd_new_request.c_requester is
                                                                                   16
                                                                                   17
                                                                                   18
Primary Key *
                                                                                id
```

Now write your own query to UNION data of this 2 processes.

This is example one which I use.

```
select
                         \verb|jwdb.app_fd_multiApproval_approvals.id, NR.dateCreated, NR.dateModified, NR.c_value, NR.c_number, NR.dateModified, NR.c_value, NR.c_number, NR.dateModified, NR.dateModified
c_doc_org, NR.c_requester_name, NR.c_priority
from
       (select 1 n union all
        select 2 union all select 3 union all
        select 4 union all select 5) numbers INNER JOIN jwdb.app_fd_multiApproval_applications NR
      on CHAR_LENGTH(NR.c_childIDs)
              -CHAR_LENGTH(REPLACE(NR.c_childIDs, ',', ''))>=numbers.n-1
JOIN jwdb.app_fd_multiApproval_approvals
ON SUBSTRING_INDEX(SUBSTRING_INDEX(NR.c_childIDs, ',', numbers.n), ',', -1) COLLATE utf8_general_ci = jwdb.
app_fd_multiApproval_approvals.id
where c_childIDs != '' and NR.c_requester is not null
UNION
select
                          id, dateCreated, dateModified,c_value, c_number, c_doc_org, c_requester_name, c_priority
from jwdb.app_fd_multiApproval_applications
where jwdb.app_fd_multiApproval_applications .c_requester is not null
```

P.S. I would like to provide my application, but it is quite robust and this is only small part of it, I will try to provide edited Multiple Approval v2 (Thread safe) with datalist inbox as soon as possible.