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.
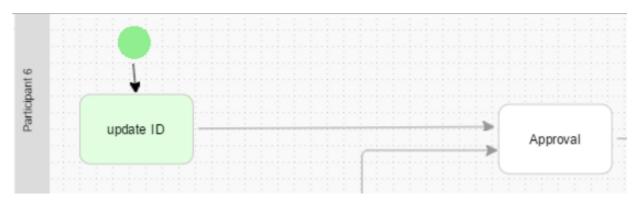
Motivation

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.
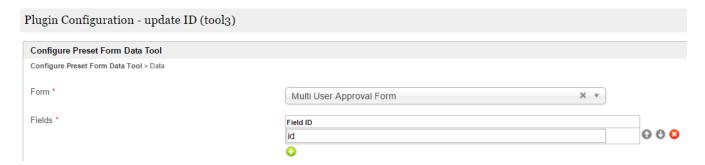
Solution

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.

Ignore "Multi User Approval Form" it is my application with different names, there should be Form linked to Approval.

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();
    con = DriverManager.getConnection("jdbc:mysql://localhost:3306/jwdb?characterEncoding=UTF-8", "root", "
/////////////");
    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
 2      jwdb.app_fd_multi_user.id,NR.dateCreated,
 3  from
 4    (select 1 n union all
 5     select 2 union all select 3 union all
 6     select 4 union all select 5) numbers  INNER
 7    on CHAR_LENGTH(NR.c_childIDs)
 8      -CHAR_LENGTH(REPLACE(NR.c_childIDs, ',',
 9  JOIN jwdb.app_fd_multi_user
10  ON SUBSTRING_INDEX(SUBSTRING_INDEX(NR.c_childI
11  where c_childIDs != '' and NR.c_requester  is
12  UNION
13  select
14      id, dateCreated, dateModified,c_value, c_p
15  from jwdb.app_fd_new_request
16  where  jwdb.app_fd_new_request.c_requester  is
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
        jwdb.app_fd_multiApproval_approvals.id,NR.dateCreated, NR.dateModified, NR.c_value, NR.c_number, NR.
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.