

# 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)

Configure Preset Form Data Tool

Configure Preset Form Data Tool > Data

Form \*

Multi User Approval Form

Fields \*

Field ID

id

### Plugin Configuration - update ID (tool3)

Data

Configure Preset Form Data Tool > Data

Data \*

Put your data in CSV format. Separate Field data with comma (,) and new record with new line (Enter)

#assignment.processId#

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: " + e.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_f
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.