M.A.C. SOLUTIONS

PROCESSVUE

Duplicate Messages

Abstract

How to handle duplicate messages in your ProcessVue system

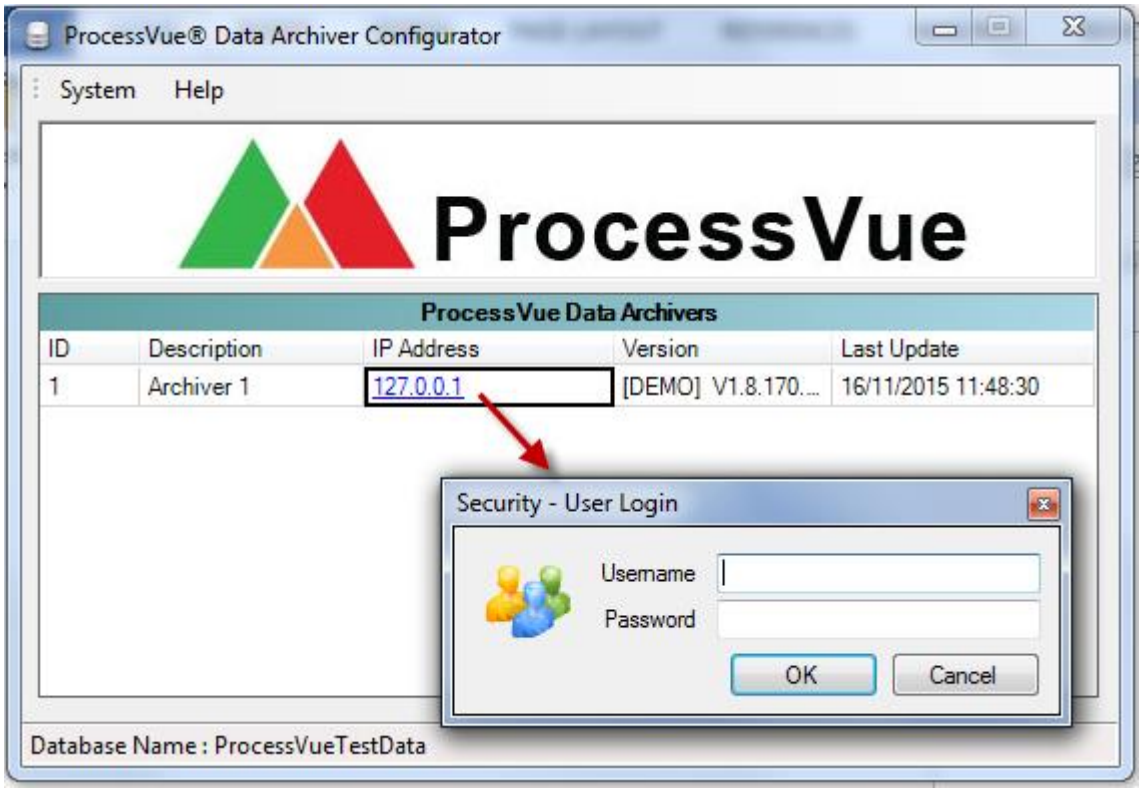
This document is designed to show how to configure ProcessVue to deal with duplicate messages coming from two different channels (connectors). For this example, the two channels will be Connector 1 and Connector 2.

In order to be able to check for duplicate messages across these two connectors, both of them will have to be routed to a third channel (Connector 3).

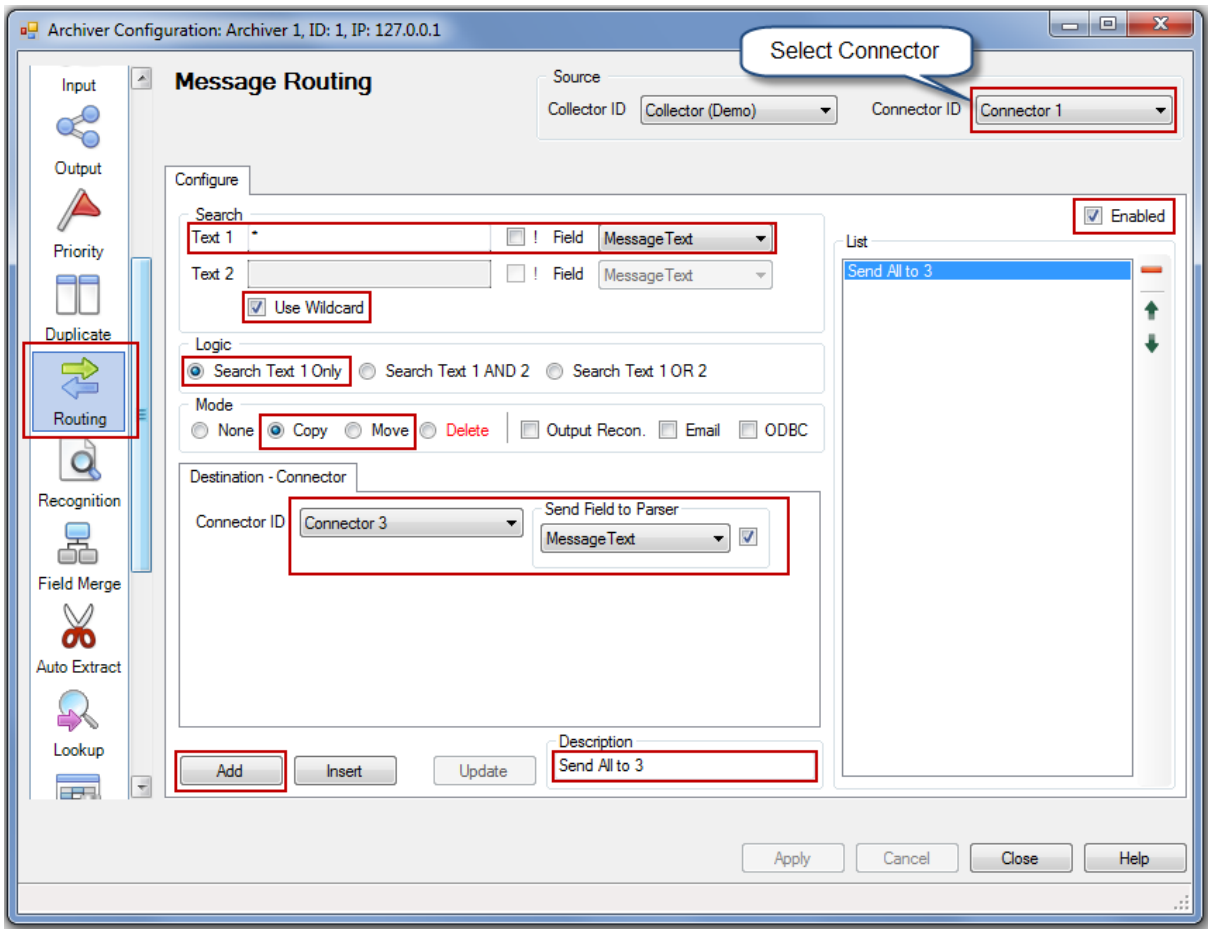
Message routing

Message routing is configured through ProcessVue Archiver as follows:

1- Open Archiver Configurator (Start > all programs > ProcessVue > Archiver Configurator)
2- Login into ProcessVue Archiver



3- Once logged in, find 'Routing' on the left-side menu and click on it.
4- On the Routing window, make sure you select the right Connector from the top right.
5- Message routing can be done for specific text within a specific field but as we need to copy all messages, we will use the wild card * for Text 1 against the Message Text field. Make sure that the 'Use Wildcard' checkbox is checked.
6- For the logic, select 'Search Text 1 only'.
7- For the mode, either 'Copy' or 'Move' can be selected, for this example copy is used in order to keep the message on the main connector as well as the routed to one.
8- Select the destination, Connector 3 is used for this example with the Message Text being sent to the parser.
9- Give the configuration description and make sure the 'Enabled' checkbox is checked.
10- Click the 'Add' button, which will add the configuration to the list on the right.
11- Finally click the 'Apply' button (see screenshot for details)

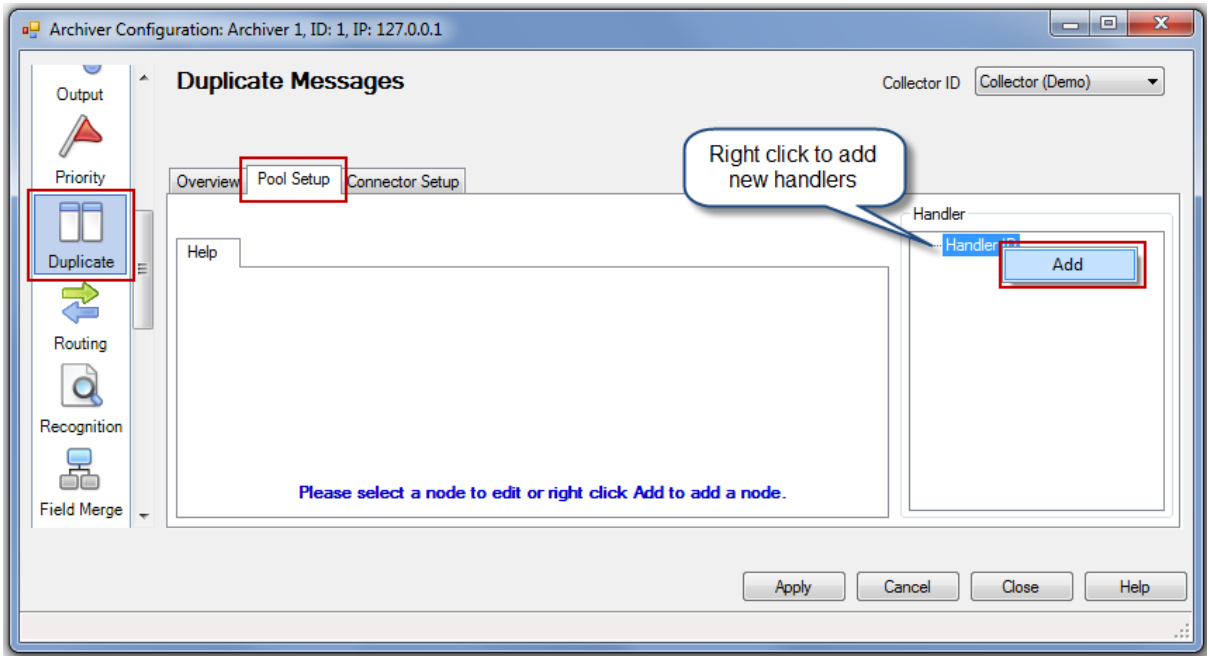


Step 3 – 15 will need to be repeated for connector 2 as well.

Enable duplicate checking

As Connectors 1 and 2 are routed to connector 3, duplicate message check will need to be implemented for connector 3 as follows:

1- Lunch ProcessVue Archiver (see step 1 – 3 of the message routing section)
2- Once logged in, find 'Duplicate' on the left-side menu and click on it.
3- Select the 'Pool Setup' tab, right click on 'Handler ID' to add new one



4- Click the expand button and click the newly created handle 'Duplicate Message 1'

5- Adjust the

   a. Stack size, this is the size of the Stack or Buffer that the Duplicate Message Handler uses. This should be set to be ((Maximum Number of Messages per Second * Deadband)* Number of Connectors routed to the Handler).

   b. Deadband, this is the time window used to determine whether a second, identical message (received during that period) should be classified as a duplicate message or not.

   c. Duplicate Window Size, this has a similar function to Deadband but, instead of time, the figure entered here represents the total number of messages to pass through, since the first message appears, for the second to be classified as duplicate.

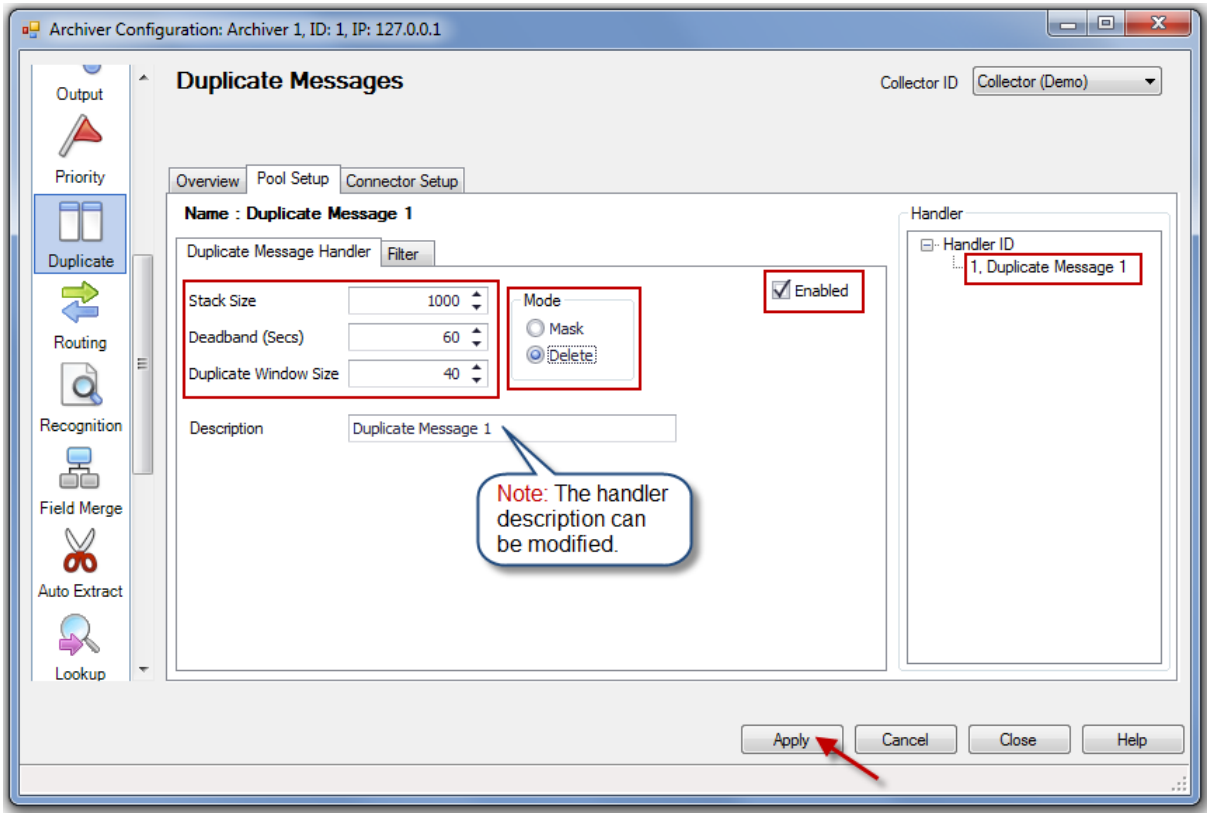
Note:

- If the Deadband or Duplicate Window size is exceeded, the duplicate message will not be classified as duplicate. Referring to the screenshot below. The limits entered are 60 seconds Deadband and 40 messages Duplicate Window Size. A message will therefore be classified as a duplicate if it arrives either within 60 seconds – or within 40 messages – of the original message, whichever limit is exceeded first.
- There will be a delay as messages will be held in a queue until the Deadband or window size are exceeded.

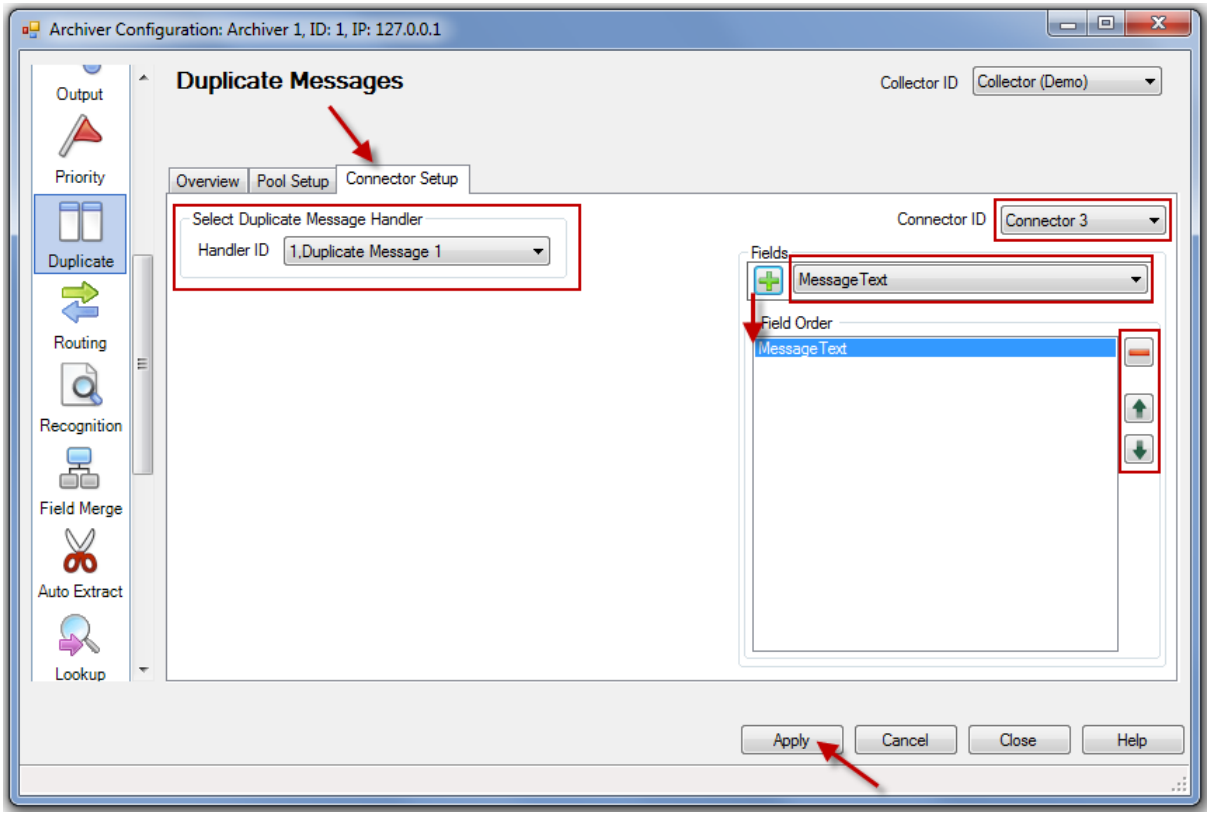
6- The mode can be configured either to mask or delete the duplicate message. Masking will keep the message on the database but will not report on ProcessVue interface. For this example, deleted is selected.

7- Once you are happy with the numbers used for the sizes and Deadband, make sure the 'Enabled' checkbox is checked.

8- Click the 'Apply' button to save the configuration.



9- Next step is to assign the configured 'Duplicate Message 1' handler to connector 3.
10- Select the 'Connector Setup' tab
11- On the Connector Setup tab, make sure the right connector is selected.
12- Select the Handler from the Handler ID dropdown list.
13- Add the fields you want to be checked for duplicates. Message Text is used for this example. However, if the Message Text contains the time stamp, the second message must contain the exact same time stamp for it to be classed as duplicate as ProcessVue compares the messages on a like to like basis. Other fields can be used instead of the Message Text, make sure the combination of fields represent as much of unique input as possible, this is to make sure that similar messages are not classed as duplicates, only the unique identical ones.
14- The order of which field to check first can be customise using the up/down allows to the right.



15- Once you are happy with the configuration, click 'Apply' to save.