

# **Optional: NiFi Error Handling**

# Error handling

## Dead Letter Queue

Add a new PutFile processor to store failed events to disk in order to create a Dead Letter Queue.

Double click the PutFile processor and set the following property:

- Directory: `/opt/nifi/nifi-current/state/dlq`

Now you need to configure your existing processors to send error events to the dead letter queue.

Hover over a ConsumeKafkaRecord\_2\_6 (doesn't matter which one), then drag its arrow to the PutFile processor, and specify the `parse.failure` relationship for the connection.

Repeat for all other ConsumeKafkaRecord\_2\_6 processors.

## Dead Letter Queue (2)

Now, hover over a PutElasticsearchRecord (doesn't matter which one), then drag its arrow to the PutFile processor, and specify the `failure` relationship for the connection.

Also, drag the same PutElasticsearchRecord's arrow to the PutFile processor again, and specify the `errors` relationship for the connection.

Repeat for all other processors.

This creates a Dead Letter Queue that will store all events that the processor could not handle for some reason or another.

# Error Handling (2)

## Retry Configuration

Double click the PutElasticsearchRecord, navigate to the relationships tab, and select the "retry" option for the `retry` relationship. Leave the retry algorithm as-is, and press apply.

This will automatically configure 10 retries with exponential backoff.

The screenshot shows a configuration interface with five tabs: SETTINGS, SCHEDULING, PROPERTIES, RELATIONSHIPS (selected), and COMMENTS. The RELATIONSHIPS tab displays three relationship types: errors, failure, and retry. Each relationship has a 'terminate' checkbox (checked) and a 'retry' checkbox (unchecked for errors and failure, checked for retry). Below each relationship type is a descriptive text block. To the right of the relationship types are three input fields: 'Number Of Retry Attempts' (set to 10), 'Retry Back Off Policy' (set to Penalize), and 'Retry Maximum Back Off Period' (set to 10 mins).

Relationship Type	terminate	retry	Description
errors	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If a "Result Record Writer" is set, any Record(s) corresponding to Elasticsearch document(s) that resulted in an "error" (within Elasticsearch) will be routed here.
failure	<input checked="" type="checkbox"/>	<input type="checkbox"/>	All flowfiles that fail for reasons unrelated to server availability go to this relationship.
retry	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	All flowfiles that fail due to server/cluster availability go to this relationship.

Number Of Retry Attempts: 10

Retry Back Off Policy: ☒ Penalize ☐ Yield

Retry Maximum Back Off Period: 10 mins

# Next Steps

## Congratulations!

You have successfully completed the following:

- Learned how to handle failure relationships
- Deployed a Dead Letter Queue
- Configured retry for a processor

## What's Next?

You can go back to the main session [here](#).