

Importance of Visibility Timeout with the Dead Letter Queue

Visibility Timeout Functionality

The main idea of the **visibility timeout** is that when a message is received from the queue, it becomes invisible for a set period of time. This ensures that no other service can pick up and process the same message at the same time. If the message isn't processed and deleted within that time, it becomes visible again and can be retried.

Dead Letter Queue (DLQ)

The main idea of the **DLQ** is to store messages that fail processing multiple times. If a message is received more than a defined number of times (e.g., 3), and still fails to be processed, it is automatically moved to the DLQ. This helps isolate problematic messages and keeps the main queue (like `OrderQueue`) clean.

How They Work Together to Keep the Service Clean

1. A message is sent to the main queue `OrderQueue`.
2. When a consumer receives the message, it becomes invisible for a set time 30 seconds
3. If the message fails to be processed in that time, it becomes visible again.
4. This retry happens until the message is received the maximum number of times 3.
5. If it still fails, it is moved to the DLQ for analysis, keeping `OrderQueue` efficient.