MQ Acknowledgement Analysis

Receiver/Client Acknowledgement

# Auto Acknowledge

When a session uses auto mode, the messages sent or received from the session are automatically acknowledged.

Pros:

Cons:

* If message processing fails, no guarantee on message gets re deliver again .
* JMS does not support an application throwing an unhandled exception in a message listener

# Duplicate Ok Acknowledge

This is same as auto acknowledge. During failure this acknowledge prevents message acknowledgement might result in more than one message becoming available for delivery again. The application must therefore be able to handle messages that are redelivered.

Pros:

* Least one time message gets delivered to receiver.

Cons:

* Chance of getting duplicate messages
* JMS does not support an application throwing an unhandled exception in a message listener

1. **Client Acknowledge**

When a session uses client mode, the messages sent or received from the session are not acknowledged automatically. The application must acknowledge the message receipt. This mode gives the application (rather than the JMS provider) complete control over message acknowledgement, at the cost of increased code complexity.

Pros:

* Gives the application full control of the acknowledgment functions

Cons:

Sender Acknowledgement

There is no separate acknowledgement pattern applied for sender. We can use reply-queue concept i.e after a message received by receiver, they post received confirmation in reply queue.