Queue Usage Types

In **IBM MQ**, queues can have a **usage type** of either **NORMAL** or **TRANSMISSION (XMITQ)**. This setting affects how the queue is used within the messaging system.

**🟢 NORMAL Queue**

* **Purpose**: Used for standard application messaging.
* **Used By**: Applications that put and get messages.
* **Behavior**:
  + Applications send messages directly to a NORMAL queue.
  + Consumers or listeners retrieve messages from these queues.
  + Example: APPLICATION.QUEUE, INVENTORY.UPDATES, etc.

**🟡 TRANSMISSION Queue (XMITQ)**

* **Purpose**: Used internally by IBM MQ for **inter-queue manager communication** (i.e., **message routing between different queue managers**).
* **Used By**: MQ channel processes (like sender channels).
* **Behavior**:
  + Messages sent to a **remote queue** are actually placed on the associated XMITQ.
  + A **sender channel** then picks up the message from the XMITQ and transmits it to the remote queue manager.
  + Example: QM2.XMITQ for routing messages to QM2.

**Summary Table**

| **Feature** | **NORMAL Queue** | **TRANSMISSION Queue (XMITQ)** |
| --- | --- | --- |
| Used by | Applications | MQ channels |
| Message flow | App → Queue → App | App → XMITQ → Channel → Remote QM |
| Holds messages for | Local consumption | Remote delivery |
| Accessed by | MQI API calls by apps | Channel processes |
| Example name | ORDER.INPUT | QM2.XMITQ |

**Practical Example**

Suppose you have two queue managers:

* QM1 (local)
* QM2 (remote)

You want to send a message from an app connected to QM1 to a remote queue ORDERS.REMOTE on QM2.

1. You define a **remote queue** ORDERS.REMOTE on QM1 that points to QM2.
2. That remote queue is configured to use a **transmission queue** like QM2.XMITQ.
3. When the app puts a message to ORDERS.REMOTE, MQ puts the message onto QM2.XMITQ.
4. The **sender channel** on QM1 sends the message to QM2, which delivers it to the real ORDERS.REMOTE queue.

**Diagram**

