CLOUD COMPUTING

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Software as a Service

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AWS-SQS

- Amazon Simple Queue Service (Amazon SQS) offers a secure, durable, and available hosted queue that lets you integrate and decouple distributed software systems and components
- Amazon SQS supports both **standard** and **FIFO queues**

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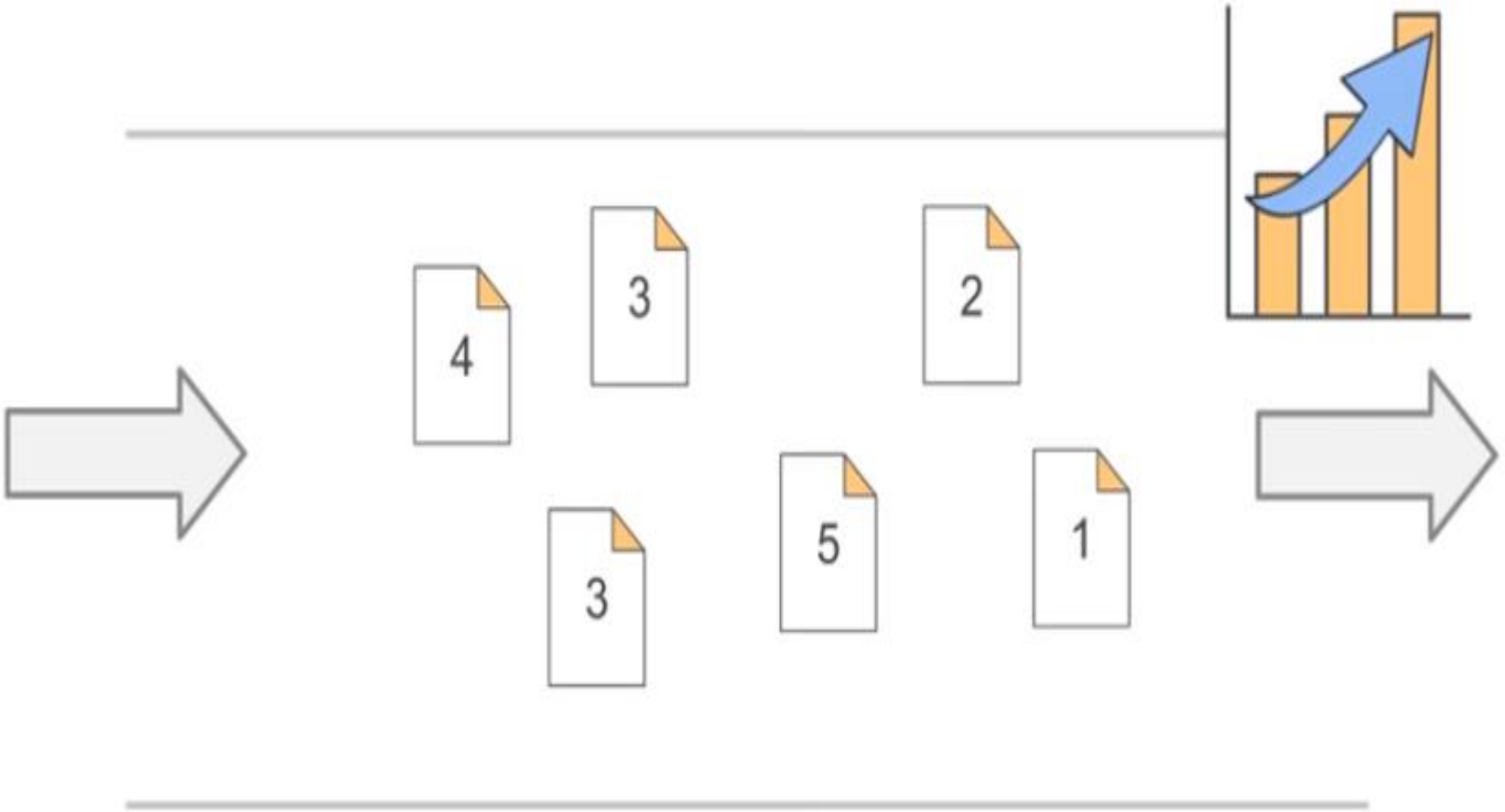
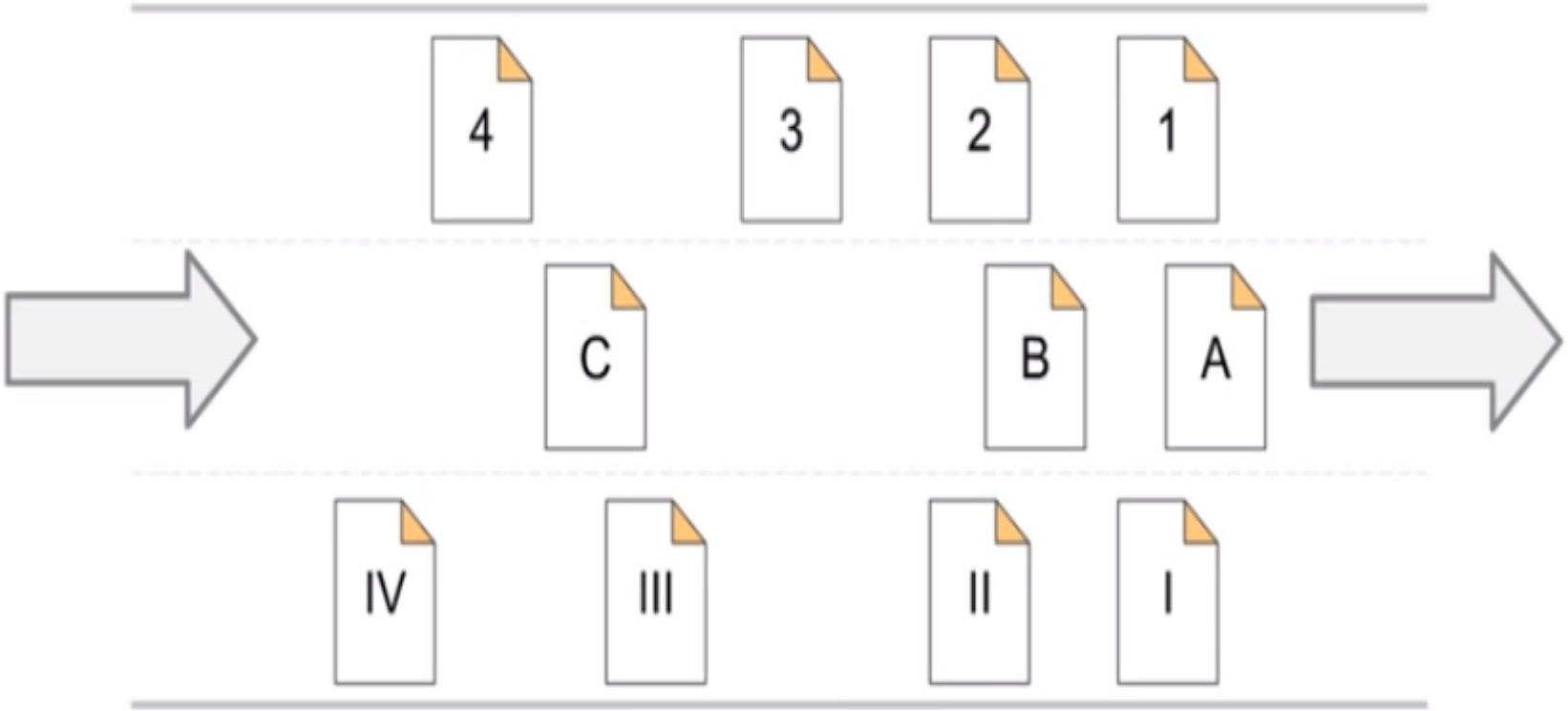
Standard Queue



FIFO Queue



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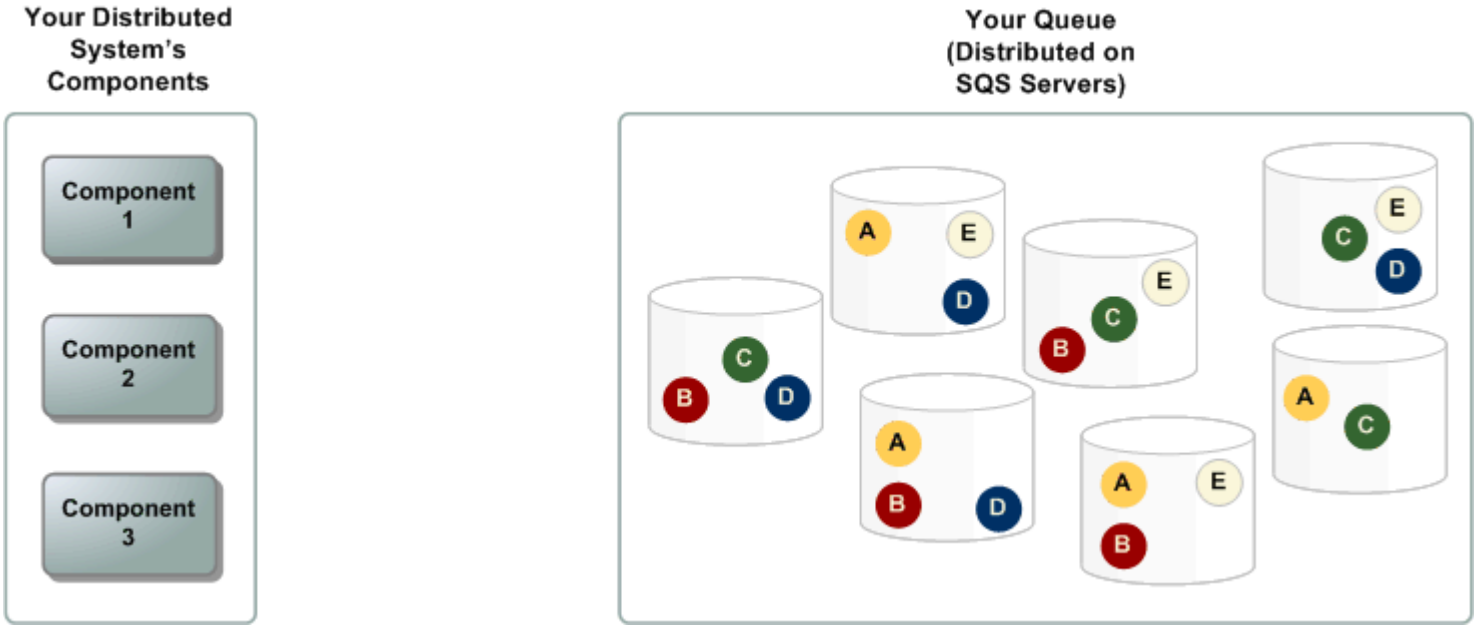

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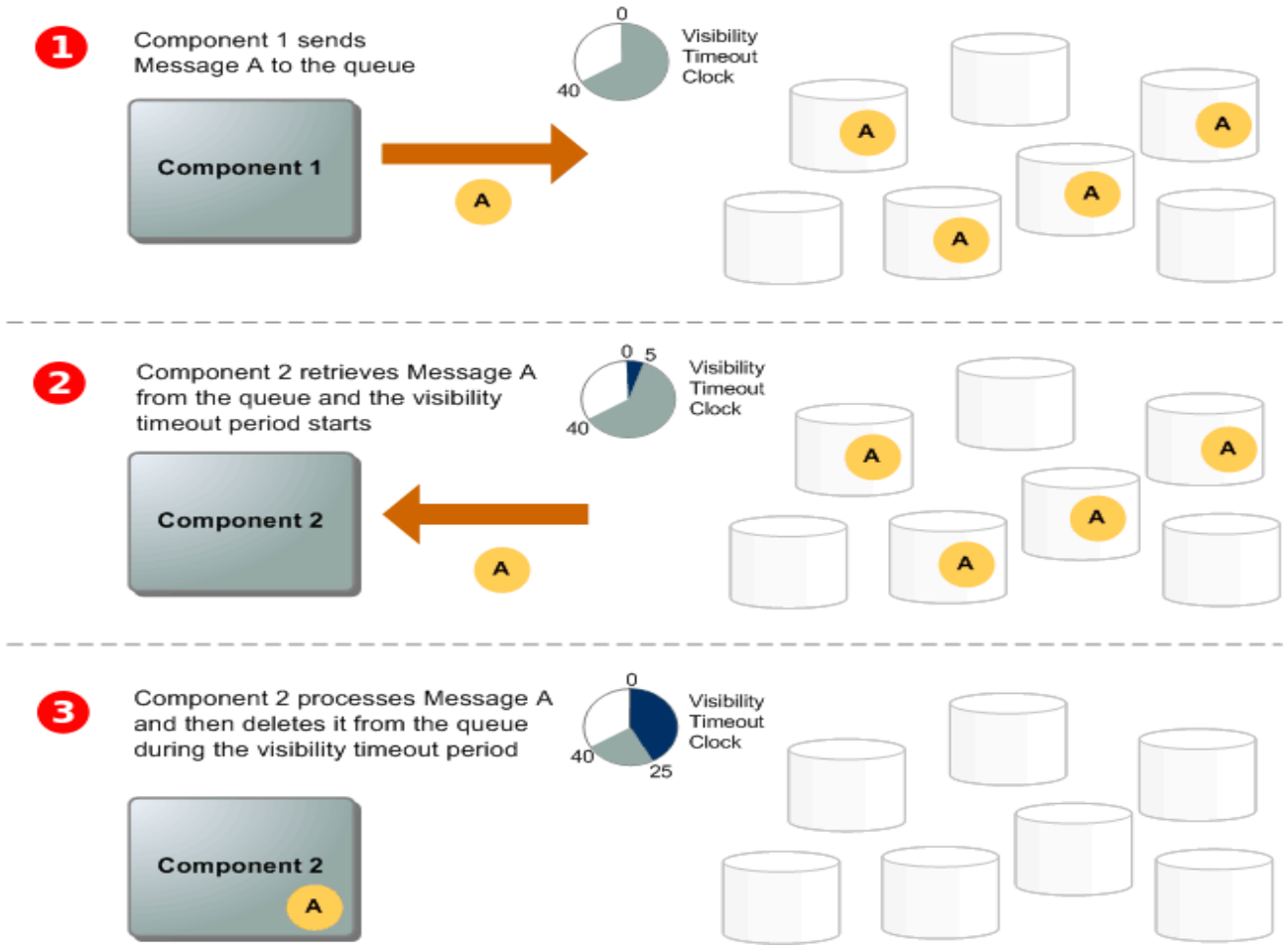

AWS-SQS

- **Security** – you can control who can send messages to and receive messages from an Amazon SQS queue.
- **Server-side encryption (SSE)** lets you transmit sensitive data by protecting the contents of messages in queues using keys managed in AWS Key Management Service (AWS KMS).
- **Durability** – To ensure the safety of your messages, Amazon SQS stores them on multiple servers. Standard queues support **at-least-once message delivery**, and FIFO queues support **exactly-once message processing**.

AWS-SQS

- **Availability** – Amazon SQS uses **redundant infrastructure** to provide highly-concurrent access to messages and high availability for producing and consuming messages.
- **Scalability** – Amazon SQS can process each **buffered request** independently, scaling transparently to handle any load increases or spikes without any provisioning instructions.
- **Reliability** – Amazon SQS locks your messages during processing, so that multiple producers can send and multiple consumers can receive messages at the same time.
- **Customization** – Your queues don't have to be exactly alike—for example, you can **set a default delay on a queue**

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AWS-SQS

- Step 1: Create a queue
- Step 2: Send a message
- Step 3: Receive and delete your message
- Step 4: Delete your queue

Step1: Create a Queue

- Open the Amazon SQS console
- Choose Create queue.
- On the Create queue page, ensure that you set the correct region.
- The Standard queue type is selected by default. Choose FIFO.
- You can't change the queue type after you create a queue.
- Enter a Name for your queue. The name of a FIFO queue must end with the .fifo suffix.
- To create your queue with the default parameters, scroll to the bottom and choose Create Queue. Amazon SQS creates the queue and displays the queue's Details page.

Step 2: Send a Message

- After you create your queue, you can send a message to it.
- From the left navigation pane, choose **Queues**. From the queue list, select the queue that you created.
- From **Actions**, choose **Send and receive messages**.
- The console displays the **Send and receive messages** page.
- Enter text in the **Message body**
- Enter a **Message group id** for the queue.
- Choose **Send message**.
- Your message is sent and the console displays a success message. Choose **View details** to display information about the sent message.

Step 3: Receive and Delete Messages

- After you send a message to a queue, you can retrieve the message from the queue. When you request messages from a queue, you can't specify which message to retrieve. Instead, you specify the maximum number of messages (up to 10) that you want to retrieve.
- From the **Queues** page, select a queue.
- From **Queue Actions**, select **Send and receive messages**.
- The console displays the **Send and receive messages** page.
- Choose **Poll for messages.**

Step 3: Receive and Delete Messages

- Amazon SQS begins to poll servers to find messages in the queue. The progress bar on the right side of the **Receive messages** section displays the polling duration.
- The **Messages** section displays a list of the received messages. For each message, the list displays the message ID, sent date, size, and receive count.
- To delete messages, select the messages that you want to delete and then choose **Delete**.
- In the **Delete Messages** dialog box, choose **Delete**.

Step 3: Delete Queue

- From the queue list, select the queue that you have created.
- From the Queues page, select the queue to delete.
- Choose Delete queue.
- The console displays the Delete queue dialog box.
- In the Delete queue dialog box, confirm the deletion by entering delete.
- Choose Delete.

THANK YOU

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