



Pub-Sub. Publishing- Subscription

<https://t.me/learningnets>

Publish/Subscribe

- ◆ It is an asynchronous and scalable messaging service that allows you to produce messages that are processed by other entities.



- ◆ It has latencies of around 100 milliseconds.
- ◆ It is very useful for data integration without having to modify source and destination

Characteristics

- ◆ Asynchronous messaging:
 - ◇ Google Cloud Pub/Sub enables asynchronous communication between components of an application or between separate applications.
 - ◇ Messages are sent and received independently, which means senders and receivers don't need to be online at the same time.

Characteristics

- ◆ **Scalability:**

- ◆ The service is highly scalable and can handle workloads from a few requests per second to millions of requests per second.

- ◆ **Reliability:**

- ◆ It has been designed to be highly reliable. Messages are durably stored, minimizing the chance of data loss in the delivery process.

Characteristics

- ◆ Batch message delivery:

- ◆ It can be configured to deliver messages in batches, helping to reduce latency and increase data transfer efficiency.

- ◆ Topics and subscriptions:

- ◆ The messages are organized into topics, which are channels of communication. Message consumers subscribe to these topics to receive messages.

Characteristics

- ◆ Message Retention:

- ◆ Messages can be retained for a configurable period of time in Pub/Sub, which is useful for data retrieval or retrospective analysis.

- ◆ Integrate with other Google Cloud services:

- ◆ Google Cloud Pub/Sub natively integrates with other Google Cloud services.

Characteristics

- ◆ Triggers and Event Processing:
 - ◇ Pub/Sub can be configured to trigger events in response to incoming messages, making it easy to create automated workflows and processes.