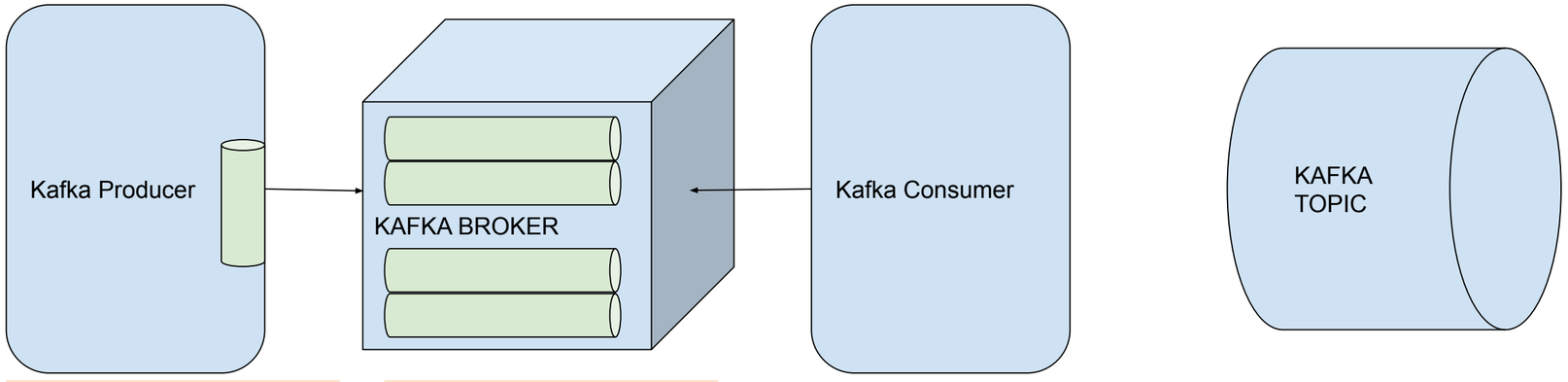

Studied

acks(=1)

retries(default=3, recomended=INT.MAX_VALUE, initial=100)

linger.ms=5

Batch.size: Default=16384

enable.idempotence=True

Delivery.timeout.ms. Default=2 min

Recomended = 30000 (30 seg)

```
Producer Conf. Proposal
acks = 1
retries = 100
linger.ms=5
delivery.timeout.ms=30000
```

Studied

auto.leader.rebalance.enable.Default=True

background.threads(default=10)

compression.type

message.max.bytes

num.io.threads(default=8)

log.cleaner.threads(default=1)

As Turbine we don't have access to modify the broker properties.

Studied

enable.auto.commit(default=True)

Reconnect.backoff.ms. Default=50

Rebalance.timeout.ms. Default=1min

session.timeout.ms(default=10s)

processing.guarantee(default: at_least_once, possible: `exactly_once`)

receive.buffer.bytes(8->16 MB, or -1)

```
Consumer Conf. Proposal
rebalance.timeout.ms=30000-DEPRECATED
 receive.buffer.bytes=-1 = Deprecated
```

retry.backoff.ms = 100

Studied

Cleanup.policy ("delete" or "compact")

retention.ms(default=7 days= 604800000)

`max.message.bytes=64000`

Flush.messages=0

segment.ms(default=7 dyas = 604800000 **)**

```
Topic Conf. Proposal
segment.ms = 5184000000 (60 days)
retention.ms = 5184000000
cleanup.policy=delete
flush.messages=0
```

The cluster-level configuration property `log.retention.check.interval.ms` (default is 5 minutes) controls how often the broker checks to see whether log segments should be deleted. The cluster-level configuration property `log.segment.delete.delay.ms` (default is 1 minute) controls how long the broker waits before deleting the log segments. This means that by default you also need to ensure you have enough disk space to store log segments for an additional 6 minutes for each partition.

Replication Factor

Default = 3
replication factors refer to backups.

For most implementations you want to follow the rule of thumb of 10 partitions per topic, and 10,000 partitions per Kafka cluster. Going beyond that amount can require additional monitoring and optimization.

Partitions = Desired Throughput / Partition Speed(10MB/s)

Proposal

- 10 partitions per topic
- Replication Factor default = 3
- # Consumer <= # partitions per topic
- Recommended 3 Kafka brokers

- topic partition count
- cleanup.policy
- retention.ms