

The Next Generation of the Consumer Rebalance Protocol (KIP-848) - Early Access Release Notes

Apache Kafka version 3.7.0 is shipped with an early access of the new generation of the consumer rebalance protocol (KIP-848). The next generation of the consumer rebalance protocol has three major changes: (1) the new consumer rebalance protocol; (2) a brand new group coordinator; and (3) a brand new threading model for the consumer. It is not recommended for production environments. Instead, we advise users to test it in clusters created for testing the feature.

Limitations:

- We don't plan to support upgrading clusters using the early access feature. We are still actively developing the feature and we want to keep the flexibility for doing non-backward compatible changes.
- The `kafka-consumer-groups.sh` command line tool is not able to describe consumer groups using the new protocol.
- Subscribing with regular expressions is not supported.
- The transaction verification ([KIP-890](#)) is not supported and must be disabled.

How to test it?

The simplest way is to create a new KRaft cluster following the instruction [here](#) but with the additional configurations added to `config/kraft/server.properties`:

```
group.coordinator.rebalance.protocols=classic,consumer
transaction.partition.verification.enable=false
```

Then, it is possible to configure the `kafka-console-consumer.sh` command line tool to use it as follow:

```
bin/kafka-console-consumer.sh --topic <TOPIC> --from-beginning --bootstrap-server localhost:9092 --consumer-property group.protocol=consumer
```

It is also possible to configure the `KafkaConsumer` by setting the `group.protocol` property to `consumer`.

```
final Map<String, Object> configs = new HashMap<>();
configs.put(ConsumerConfig.GROUP_PROTOCOL_CONFIG, "consumer");
final ConsumerConfig consumerConfig = new ConsumerConfig(configs);
```

How to report issues?

Feel free to file a bug in the [Apache Kafka](#) project for any discovered issue. We appreciate your help to test it. Happy testing!