Topic Deletion

Topic deletion is controlled by `delete.topic.enable` Kafka property that turns it on when `true`

Start a Kafka broker with broker ID `100`

```
./bin/kafka-server-start.sh config/server.properties \
  --override delete.topic.enable=true \
  --override broker.id=100 \
  --override log.dirs=/tmp/kafka-logs-100 \
  --override port=9192
```

```
...
[2019-03-04 19:43:37,392] INFO Kafka version : 2.0.1
(org.apache.kafka.common.utils.AppInfoParser)
[2019-03-04 19:43:37,393] INFO Kafka commitId : fa14705e51bd2ce5
(org.apache.kafka.common.utils.AppInfoParser)
[2019-03-04 19:43:37,394] INFO [KafkaServer id=100] started
(kafka.server.KafkaServer)
```

Create `remove-me` topic

```
./bin/kafka-topics.sh --zookeeper localhost:2181 \
  --create \
  --topic remove-me \
  --partitions 1 \
  --replication-factor 1
```

```
Created topic "remove-me".
```

List available topics

```
./bin/kafka-topics.sh --zookeeper localhost:2181 --list
```

```
remove-me
```

List details for `remove-me` topic

```
./bin/kafka-topics.sh --zookeeper localhost:2181 --describe --topic
remove-me
```

```
Topic:remove-me PartitionCount:1        ReplicationFactor:1     Configs:
        Topic: remove-me        Partition: 0    Leader: 100     Replicas:
100   Isr: 100
```

Note that the broker 100 is the leader for remove-me topic

Stop the broker ID 100

```
...
[2019-03-04 19:46:08,465] INFO [SocketServer brokerId=100] Shutting down
socket server (kafka.network.SocketServer)
[2019-03-04 19:46:08,556] INFO [SocketServer brokerId=100] Shutdown
completed (kafka.network.SocketServer)
[2019-03-04 19:46:08,586] INFO [KafkaServer id=100] shut down completed
(kafka.server.KafkaServer)
```

Start another with broker ID 200

```
./bin/kafka-server-start.sh config/server.properties \
  --override delete.topic.enable=true \
  --override broker.id=200 \
  --override log.dirs=/tmp/kafka-logs-200 \
  --override port=9292
```

```
...
[2019-03-04 19:46:41,531] INFO Kafka version : 2.0.1
(org.apache.kafka.common.utils.AppInfoParser)
[2019-03-04 19:46:41,531] INFO Kafka commitId : fa14705e51bd2ce5
(org.apache.kafka.common.utils.AppInfoParser)
[2019-03-04 19:46:41,532] INFO [KafkaServer id=200] started
(kafka.server.KafkaServer)
```

Delete remove-me topic

```
./bin/kafka-topics.sh --zookeeper localhost:2181 --delete --topic remove-
me
```

```
Topic remove-me is marked for deletion.
Note: This will have no impact if delete.topic.enable is not set to true.
```

List the topics

```
./bin/kafka-topics.sh --zookeeper localhost:2181 --list
```

```
remove-me - marked for deletion
```

As you may have noticed, `kafka-topics.sh --delete` will only delete a topic if the topic's leader broker is available (and can acknowledge the removal). Since the broker ID 100 is down and currently unavailable the topic deletion has only been recorded in Zookeeper.

```
./bin/zookeeper-shell.sh :2181
```

```
Connecting to :2181
Welcome to ZooKeeper!
JLine support is disabled

WATCHER::

WatchedEvent state:SyncConnected type:None path:null
```

```
ls /admin/delete_topics
```

```
[remove-me]
```

As long as the leader broker ID 100 is not available, the topic to be deleted remains marked for deletion.

Start the broker 100

```
./bin/kafka-server-start.sh config/server.properties \
  --override delete.topic.enable=true \
  --override broker.id=100 \
  --override log.dirs=/tmp/kafka-logs-100 \
  --override port=9192
```

With logging at DEBUG level, you should see the following messages in the logs:

```
[2019-03-04 19:49:35,618] INFO Kafka version : 2.0.1
(org.apache.kafka.common.utils.AppInfoParser)
[2019-03-04 19:49:35,619] INFO Kafka commitId : fa14705e51bd2ce5
(org.apache.kafka.common.utils.AppInfoParser)
[2019-03-04 19:49:35,645] INFO [KafkaServer id=100] started
(kafka.server.KafkaServer)
[2019-03-04 19:49:35,687] INFO [GroupCoordinator 100]: Removed 0 offsets
associated with deleted partitions: remove-me-0.
(kafka.coordinator.group.GroupCoordinator)
[2019-03-04 19:49:35,750] INFO Replica loaded for partition remove-me-0
with initial high watermark 0 (kafka.cluster.Replica)
[2019-03-04 19:49:35,751] INFO [ReplicaFetcherManager on broker 100]
Removed fetcher for partitions  (kafka.server.ReplicaFetcherManager)
[2019-03-04 19:49:35,891] INFO [ReplicaFetcherManager on broker 100] Added
fetcher for partitions List() (kafka.server.ReplicaFetcherManager)
[2019-03-04 19:49:36,060] INFO [ReplicaAlterLogDirsManager on broker 100]
Added fetcher for partitions List()
(kafka.server.ReplicaAlterLogDirsManager)
[2019-03-04 19:49:36,253] INFO [GroupCoordinator 100]: Removed 0 offsets
associated with deleted partitions: remove-me-0.
(kafka.coordinator.group.GroupCoordinator)
[2019-03-04 19:49:36,261] INFO [GroupCoordinator 100]: Removed 0 offsets
associated with deleted partitions: remove-me-0.
(kafka.coordinator.group.GroupCoordinator)
[2019-03-04 19:49:36,269] INFO [ReplicaFetcherManager on broker 100]
Removed fetcher for partitions  (kafka.server.ReplicaFetcherManager)
[2019-03-04 19:49:36,310] INFO [ReplicaAlterLogDirsManager on broker 100]
Removed fetcher for partitions  (kafka.server.ReplicaAlterLogDirsManager)
[2019-03-04 19:49:36,320] INFO [ReplicaFetcherManager on broker 100]
Removed fetcher for partitions remove-me-0
(kafka.server.ReplicaFetcherManager)
[2019-03-04 19:49:36,320] INFO [ReplicaAlterLogDirsManager on broker 100]
Removed fetcher for partitions remove-me-0
(kafka.server.ReplicaAlterLogDirsManager)
[2019-03-04 19:49:36,356] INFO [ReplicaFetcherManager on broker 100]
Removed fetcher for partitions  (kafka.server.ReplicaFetcherManager)
[2019-03-04 19:49:36,356] INFO [ReplicaAlterLogDirsManager on broker 100]
Removed fetcher for partitions  (kafka.server.ReplicaAlterLogDirsManager)
[2019-03-04 19:49:36,360] INFO [ReplicaFetcherManager on broker 100]
Removed fetcher for partitions remove-me-0
(kafka.server.ReplicaFetcherManager)
[2019-03-04 19:49:36,360] INFO [ReplicaAlterLogDirsManager on broker 100]
Removed fetcher for partitions remove-me-0
(kafka.server.ReplicaAlterLogDirsManager)
[2019-03-04 19:49:36,458] INFO Log for partition remove-me-0 is renamed to
/tmp/kafka-logs-100/remove-me-0.837b3aa03d4d47398be1c472f151cf9b-delete
and is scheduled for deletion (kafka.log.LogManager)
```

The topic is now deleted. Use Zookeeper Shell to confirm it.

```
./bin/zookeeper-shell.sh :2181 ls /admin/delete_topics
```

```
Connecting to :2181

WATCHER::

WatchedEvent state:SyncConnected type:None path:null
[]
```