etcd and Raft

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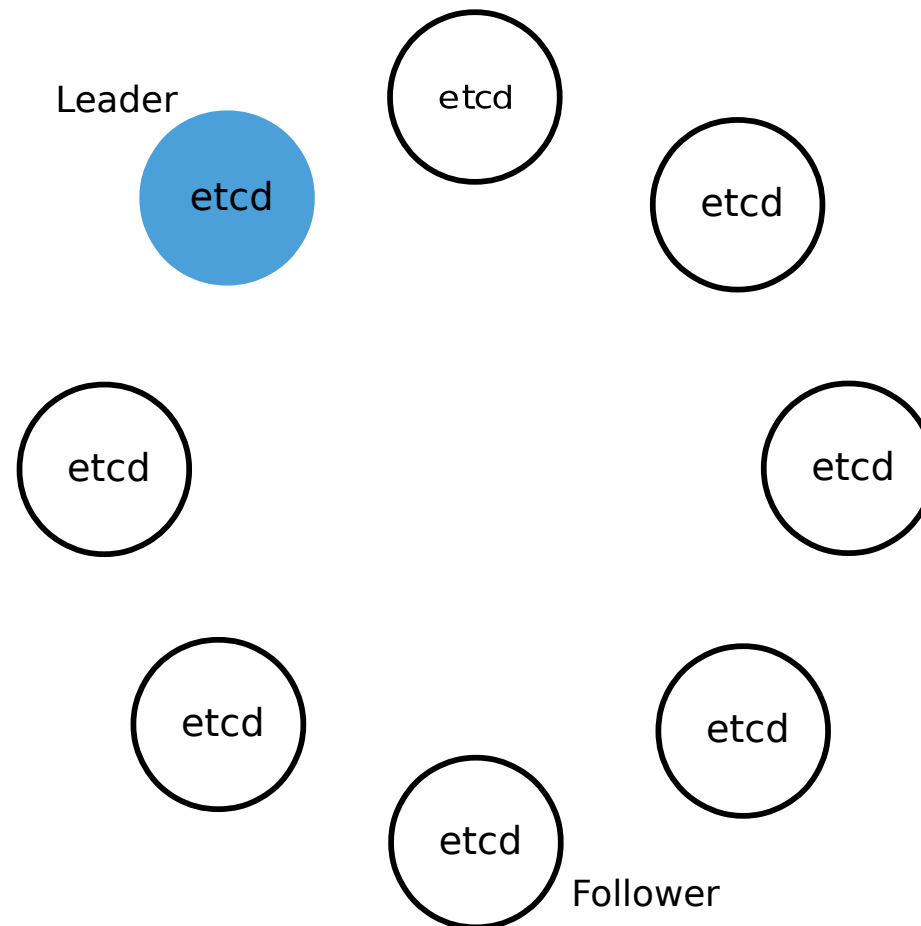
CoreOS

docker
containers

docker
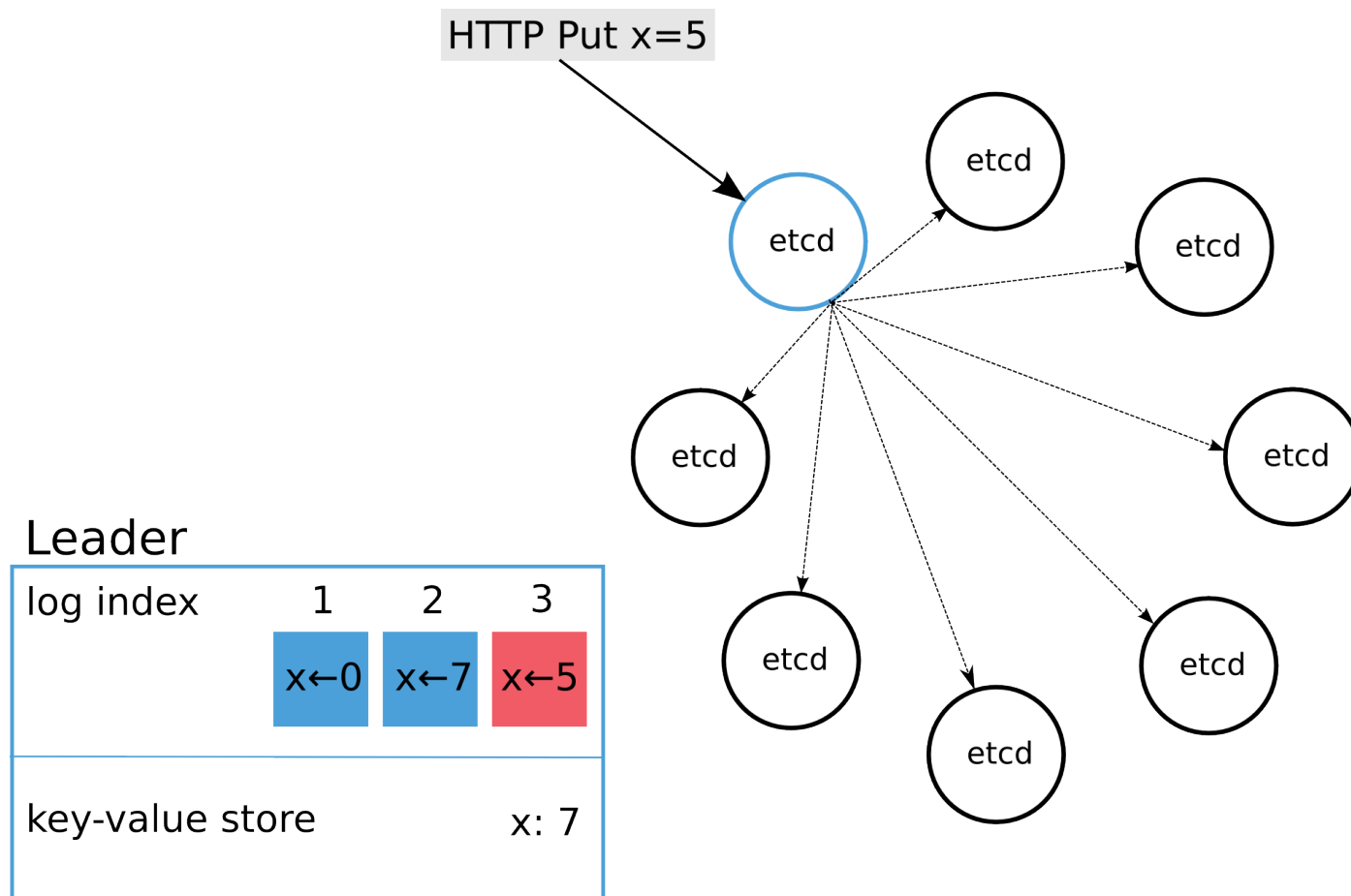
CoreOS Host
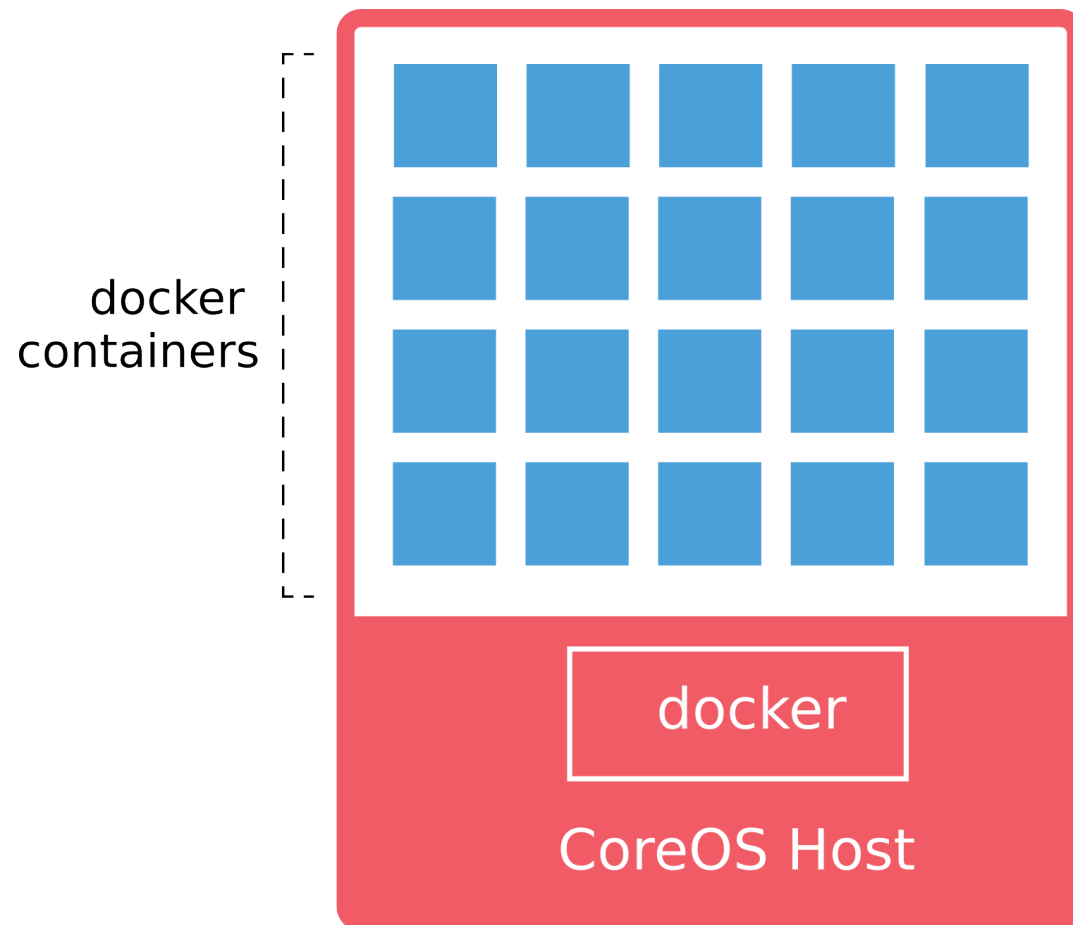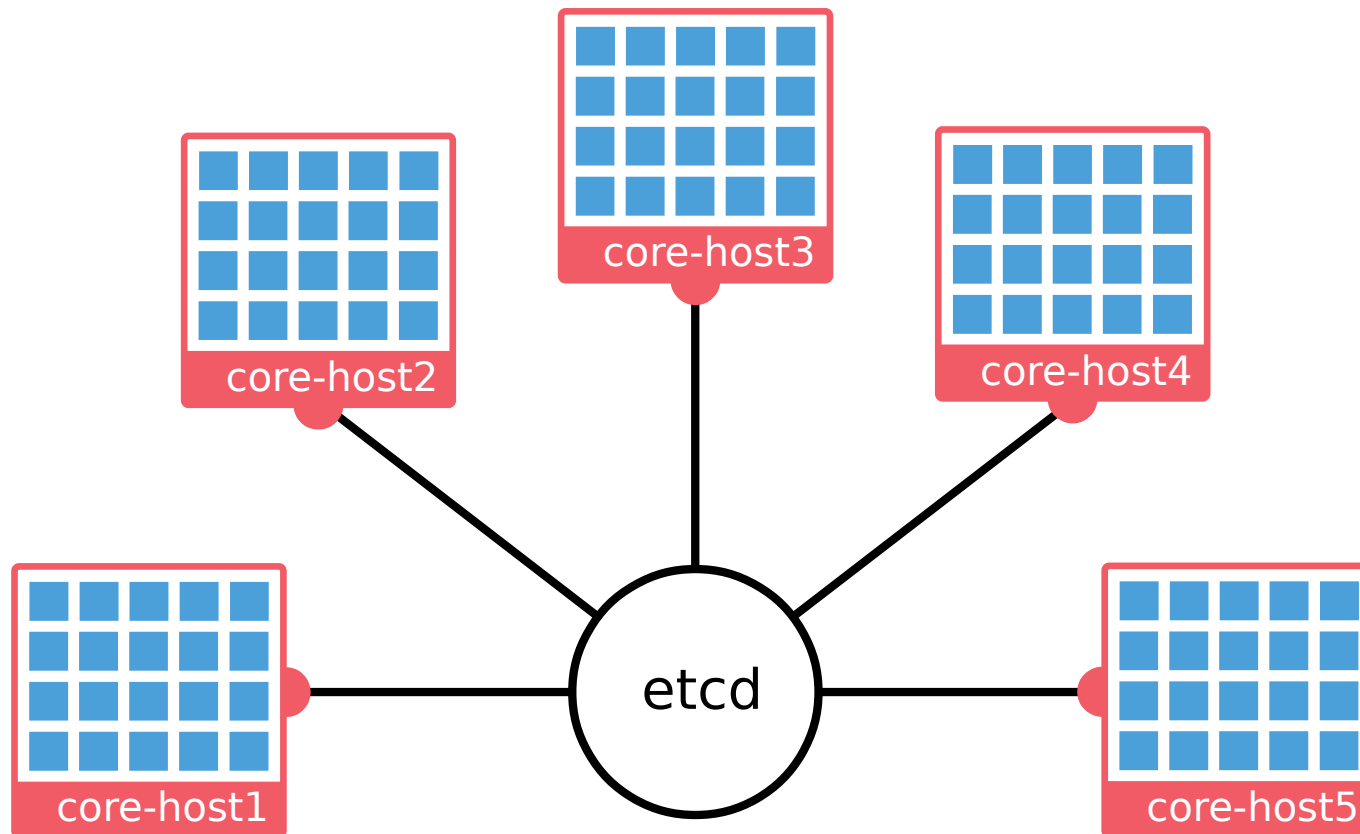
etcd

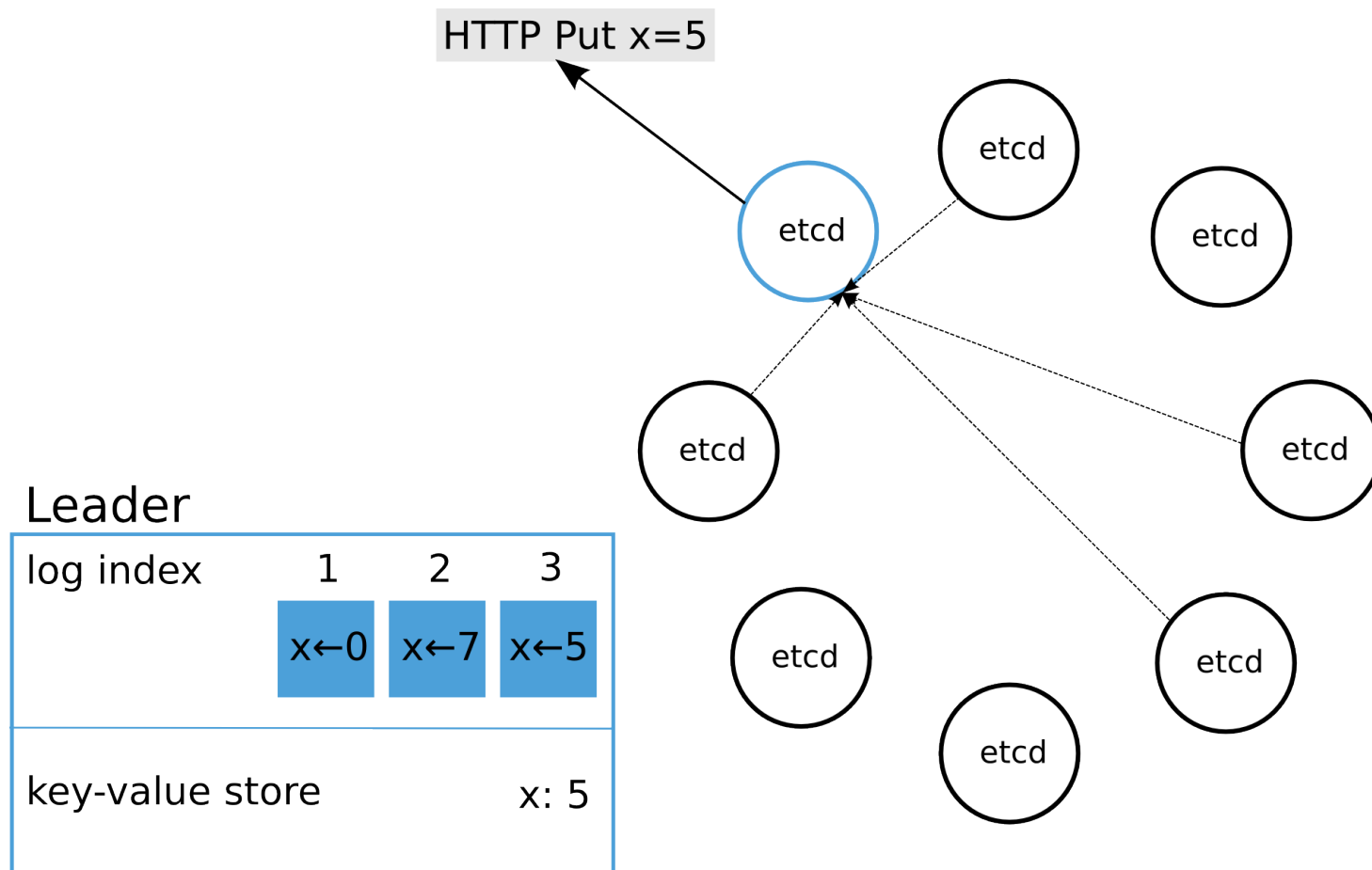# etcd Cluster

Client Interaction

```
curl -L http://127.0.0.1:4001/v2/keys/x -XPUT -d value="7"

{
    "action": "set",
    "node": {
        "createdIndex": 2,
        "key": "/x",
        "modifiedIndex": 2,
        "value": "7"
    },
    "prevNode": {
        "createdIndex": 1,
        "key": "/x",
        "value": "0",
        "modifiedIndex": 1
    }
}
```

Writing an entry– Part 1

Writing an entry— Part 2

Log compaction & Snapshots

log index   1   2   3   4   5   6   7   8   9

before | x←0 | x←7 | x←5 | y←4 | y←2 | x←3 |

after

last included index: 6
x ← 3
y ← 2

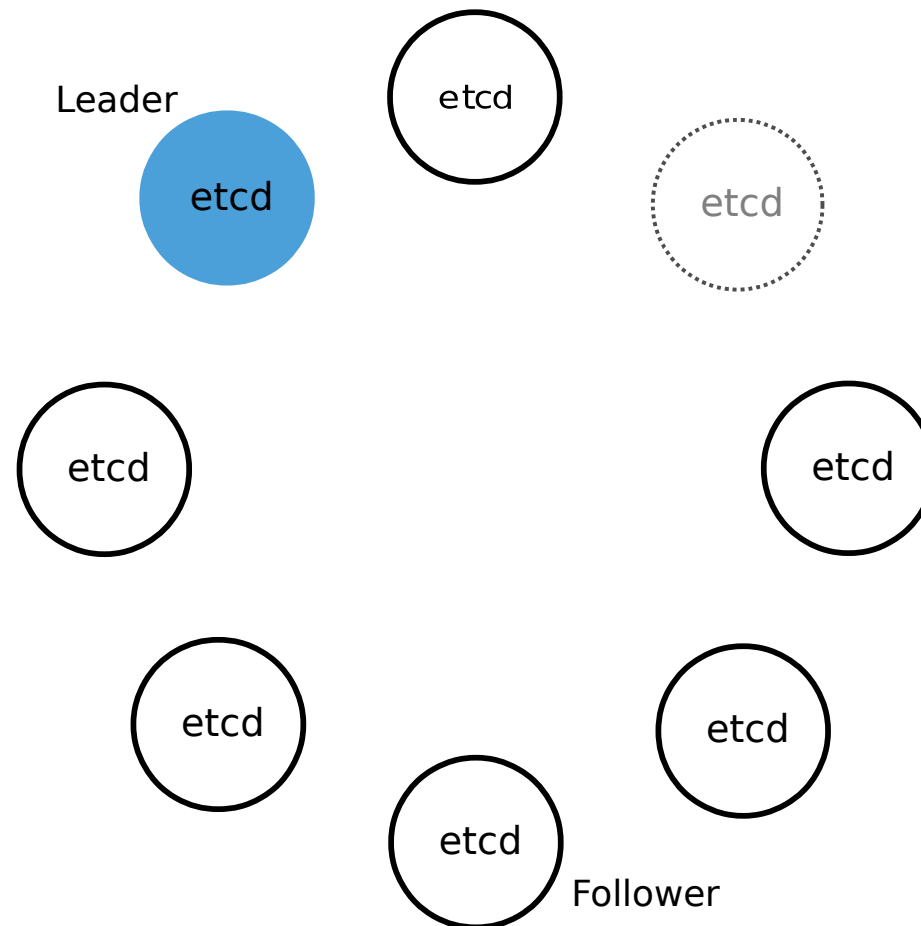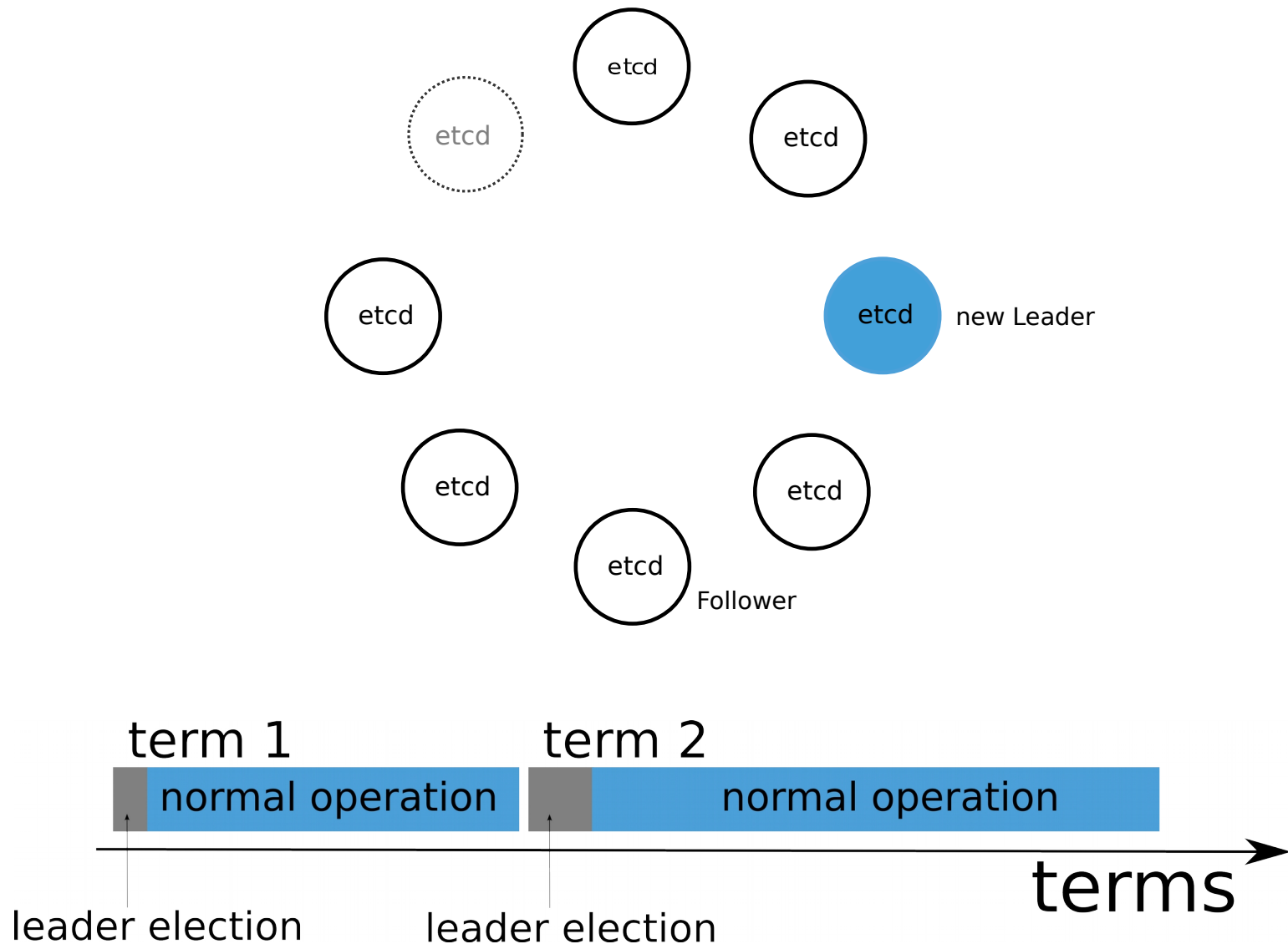| y←5 | x←9 | x←8 |

Snapshot

Follower Crash

Leader Crash & Leader election

Questions?

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