Kafka MirrorMaker

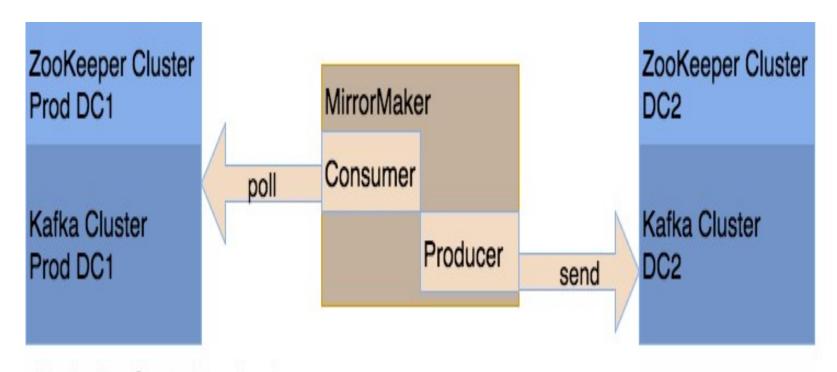
MirrorMaker and Mirroring

- Mirroring is replication between clusters called *mirroring* to not confuse with *replication*
 - replication uses cluster involving brokers, partition leaders, partition followers, ISRs and ZooKeeper
 - mirroring is just a consumer/producer pair in two clusters
- MirrorMaker is used for replicating one clusters data to another cluster

Mirror Maker

- Replicates topics (data plus configurations)
- Replicates consumer groups including offsets to migrate applications between clusters
- Replicates ACLs
- Preserves partitioning
- Automatically detects new topics and partitions
- Provides a wide range of metrics, such as end-to-end replication latency across multiple data centers/clusters
- Fault-tolerant and horizontally scalable operations

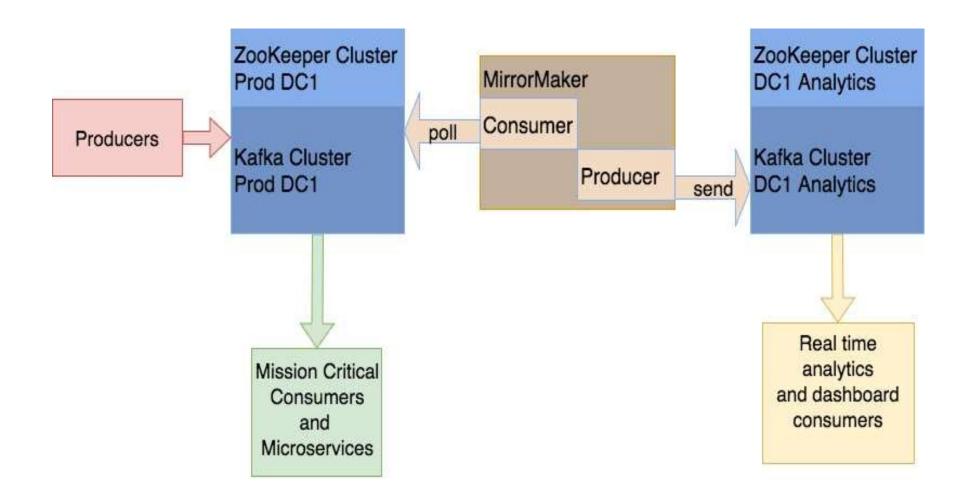
Disaster Recovery



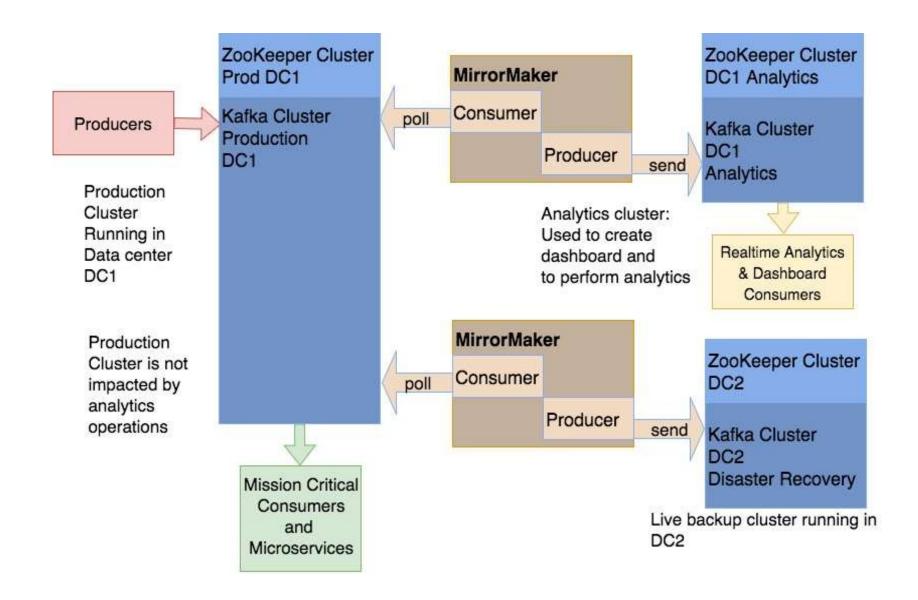
Production Cluster Running in Data center DC1

Live backup running in DC2

Scale Write, Avoid Impacting Mission Critical Services



Many MirrorMakers for different Purposes



MirrorMakers - Configuration

```
# Basic settings
clusters = primary, secondary
primary.bootstrap.servers = broker3-primary:9092
secondary.bootstrap.servers = broker5-secondary:9092

# Define replication flows
primary->secondary.enabled = true
primary->secondary.topics = foobar-topic, quux-.*
```

Run in secondary's data center, reading from the remote `primary` cluster \$./bin/connect-mirror-maker.sh connect-mirror-maker.properties --clusters secondary