

TGI EP.007

# Pulsar

**Topic: Cluster & Geo-replication**

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Time: 1 PM PST | Host: Sijie Guo | Date: 04-24-2020



# Cluster & Geo Replication

TGIP  
Episode 007



# Cluster

- Identified by a cluster-name
- Cluster name is used for configuring geo-replication
- Cluster configuration
  - Web service url (`http://`)
  - Web service url tls (`https://`)
  - Broker service url (`pulsar://`)
  - Broker service url tls (`pulsar+ssl://`)

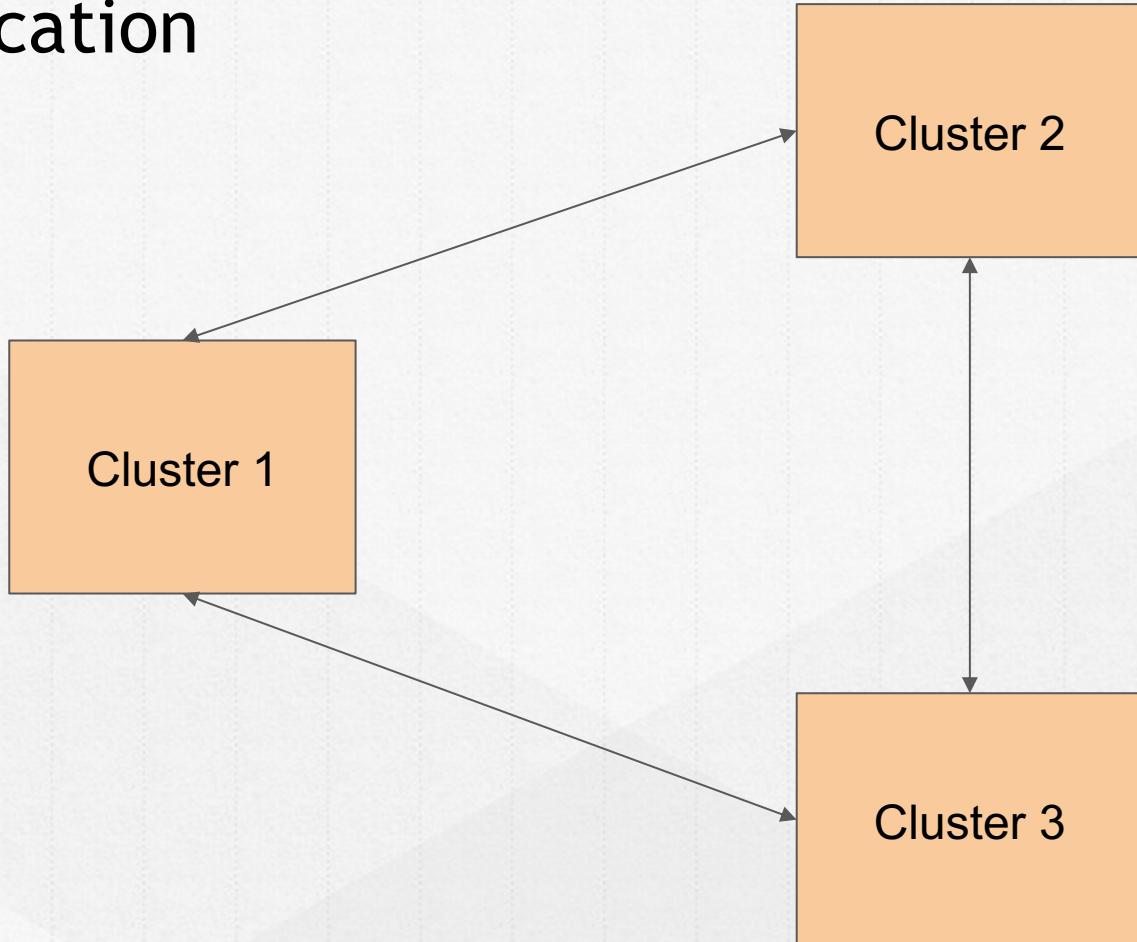
# Cluster Setup

```
$ bin/pulsar initialize-cluster-metadata \
  --cluster pulsar-cluster-1 \
  --zookeeper zk1.us-west.example.com:2181 \
  --configuration-store zk1.us-west.example.com:2181 \
  --web-service-url http://pulsar.us-west.example.com:8080 \
  --web-service-url-tls https://pulsar.us-west.example.com:8443 \
  --broker-service-url pulsar://pulsar.us-west.example.com:6650 \
  --broker-service-url-tls pulsar+ssl://pulsar.us-west.example.com:6651
```

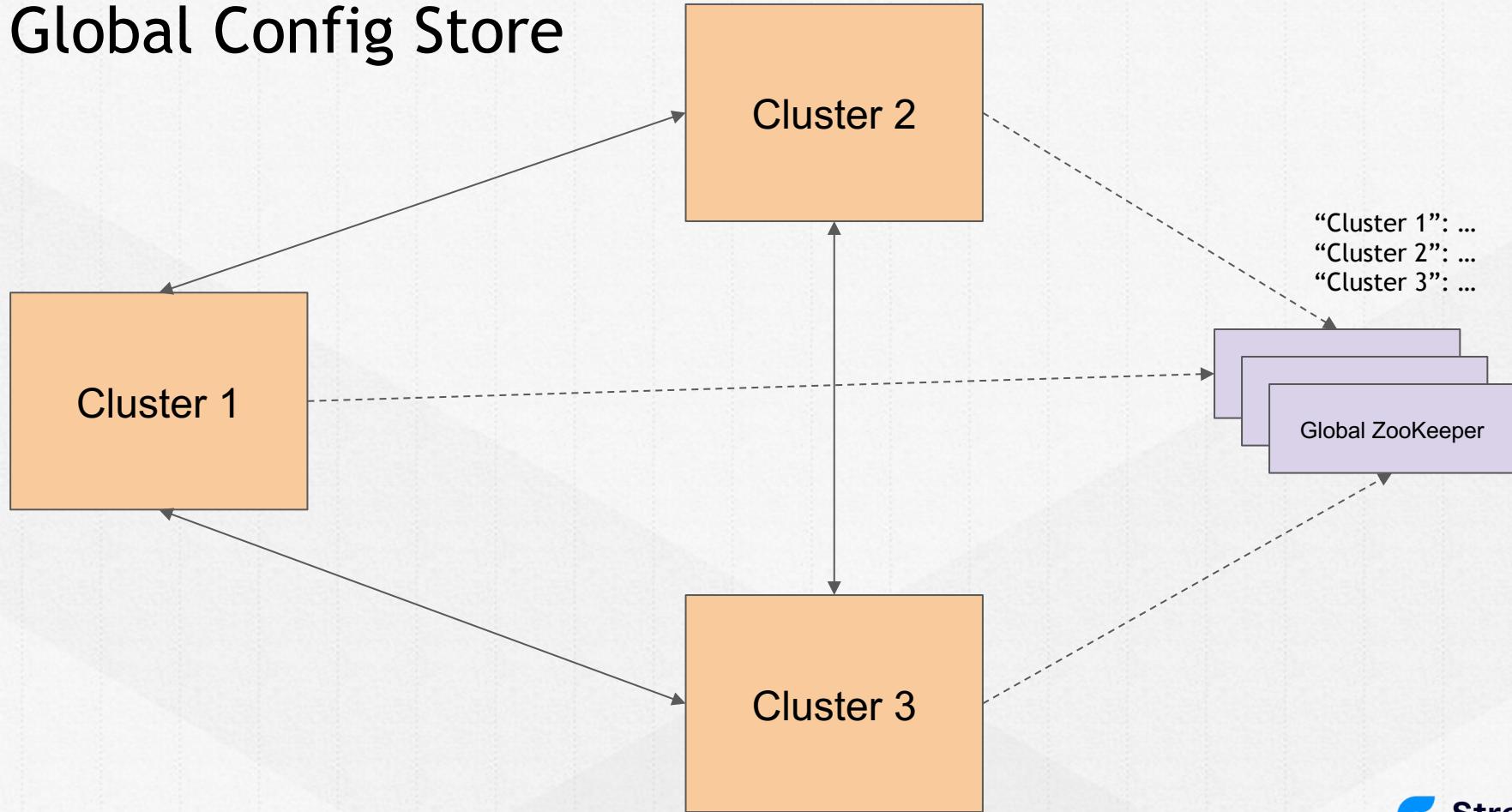
# Cluster Operations

- Create
- Get
- Update
- List

# Geo Replication



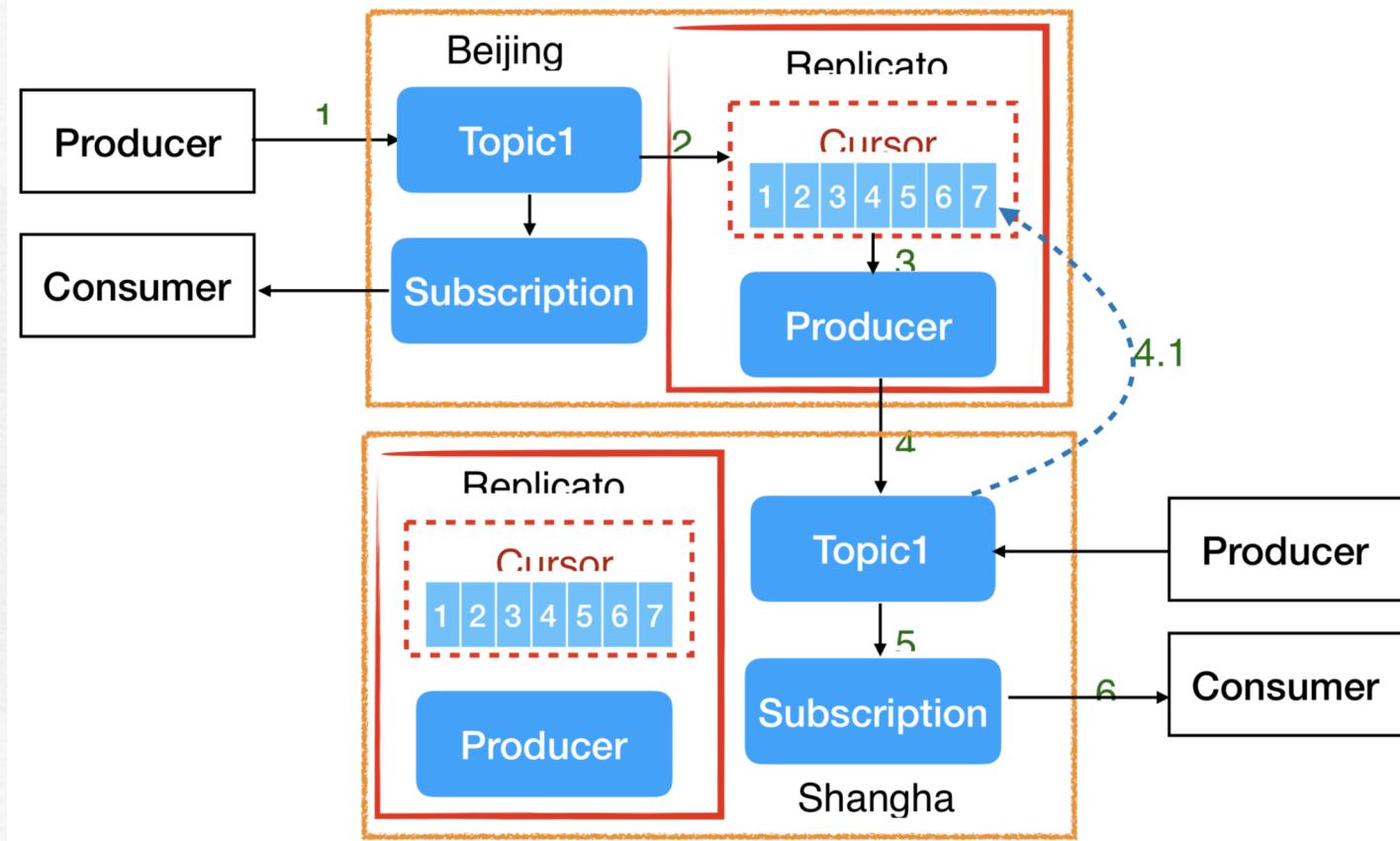
# Global Config Store



# ■ Allowed Clusters & Replicated Clusters

- ❑ `bin/pulsar-admin tenants create --allowed-clusters <clusters-list>`
- ❑ `bin/pulsar-admin namespaces create --clusters <clusters-list>`

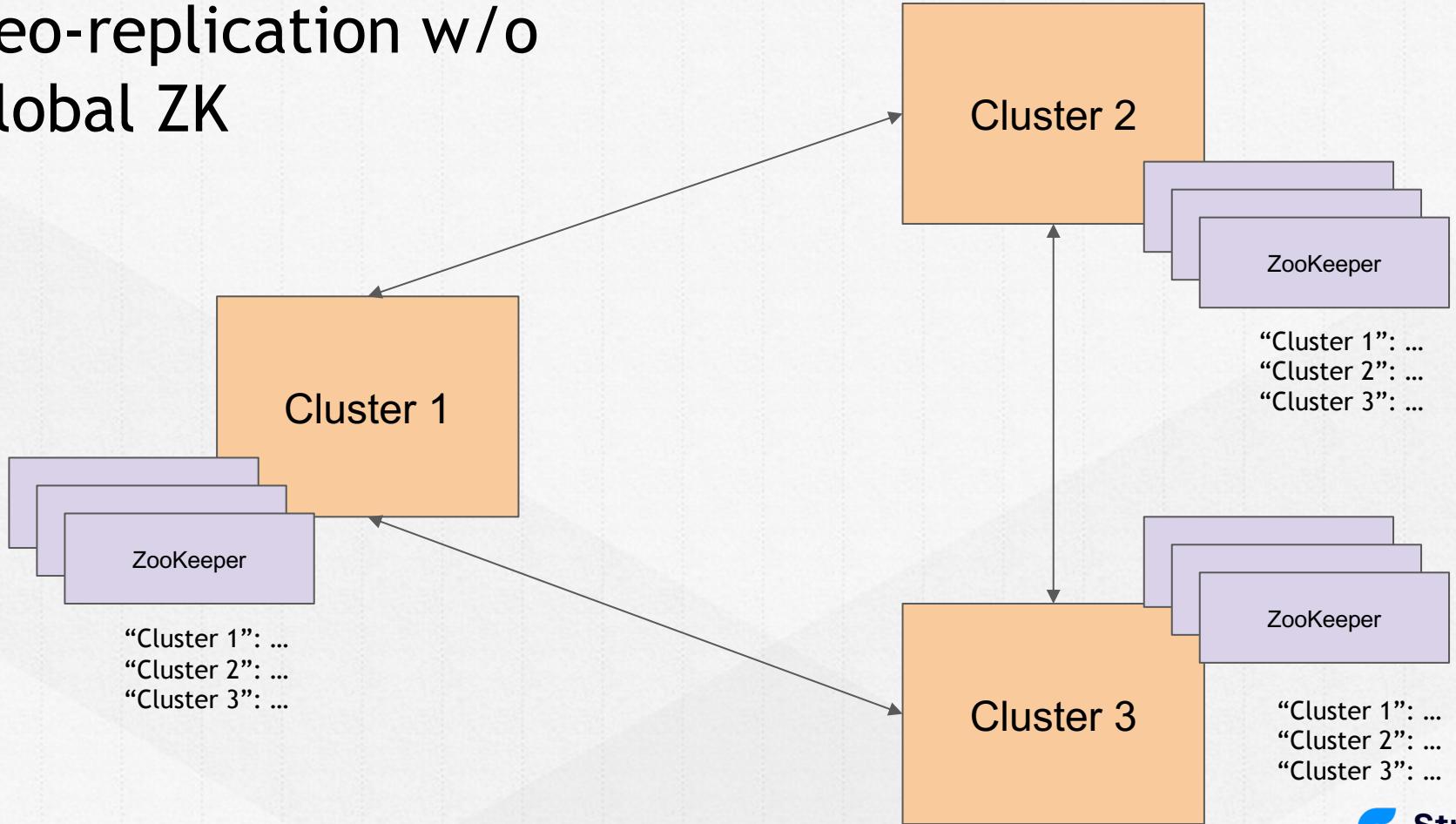
# Geo-Replication



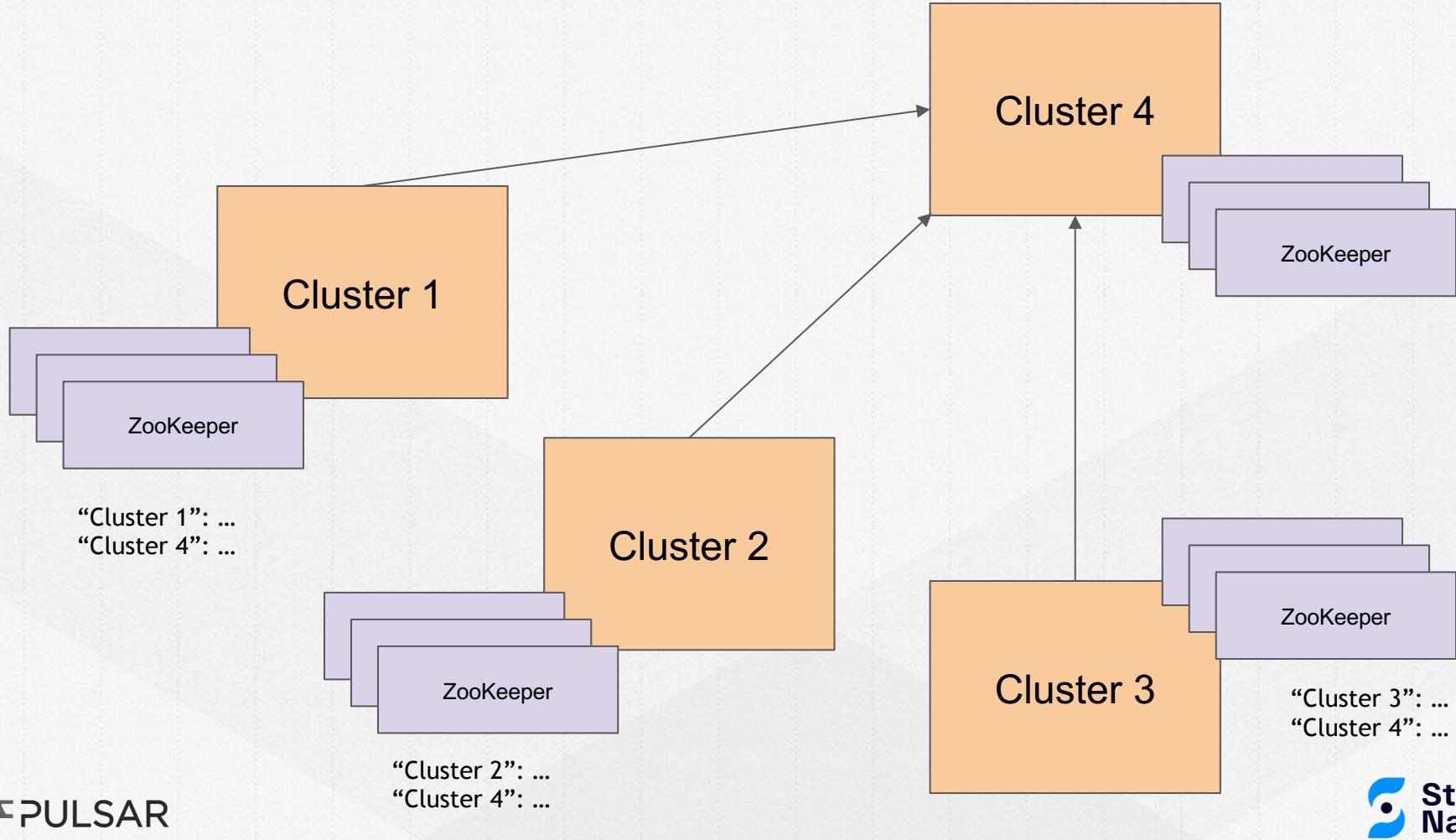
# Demo

- Configuration Store
  - pulsar-sfo-zookeeper
- Two clusters
  - pulsar-sfo-1
  - pulsar-sfo-2

# Geo-replication w/o Global ZK



# Aggregation Pattern



# Failover Pattern

