

# Real-time monitoring GlusterFS

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# About Me

GlusterFS developer working in  
Red Hat, Bengaluru

# Introduction to GlusterFS

- GlusterFS is a scalable network filesystem
- Distributed and Replicated Volumes
- Features: Replication, Geo-replication, Self Heal, Rebalance, Sharding etc
- Bricks, Volumes, Cluster and Clients

# Monitoring Challenges

- Polling
- Wasting network bandwidth
- Not real-time
- All the status not available via CLI

# Without Events APIs

Node1

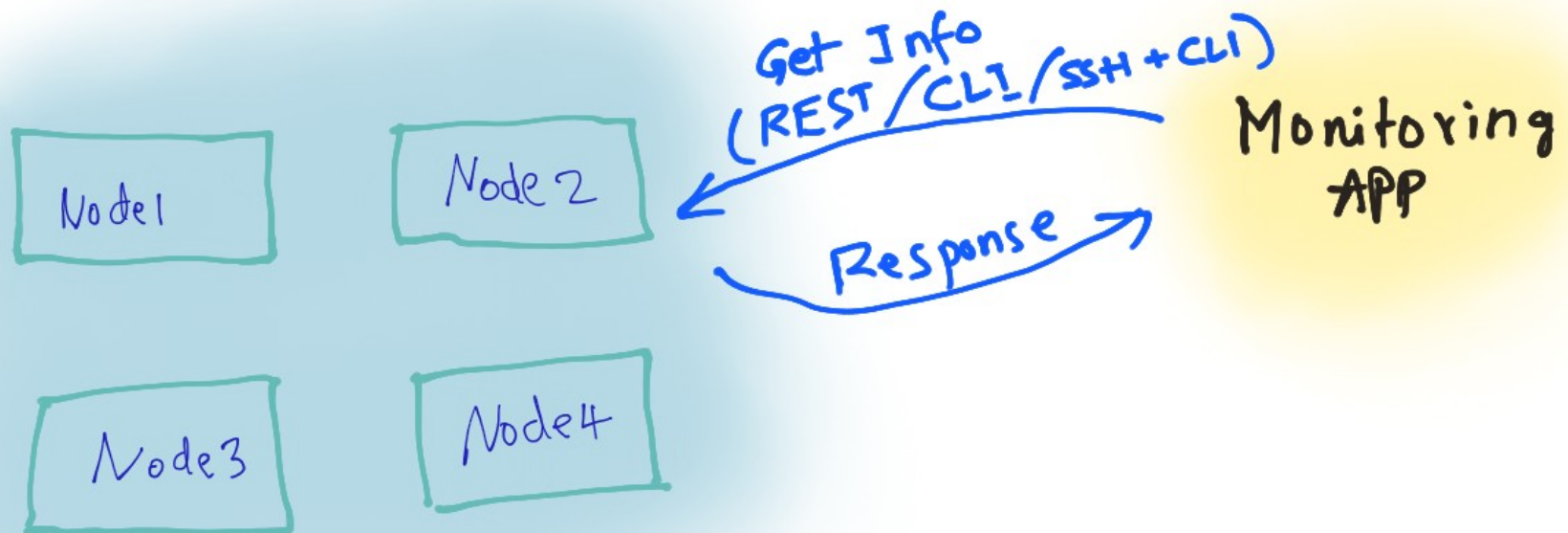
Node2

Node3

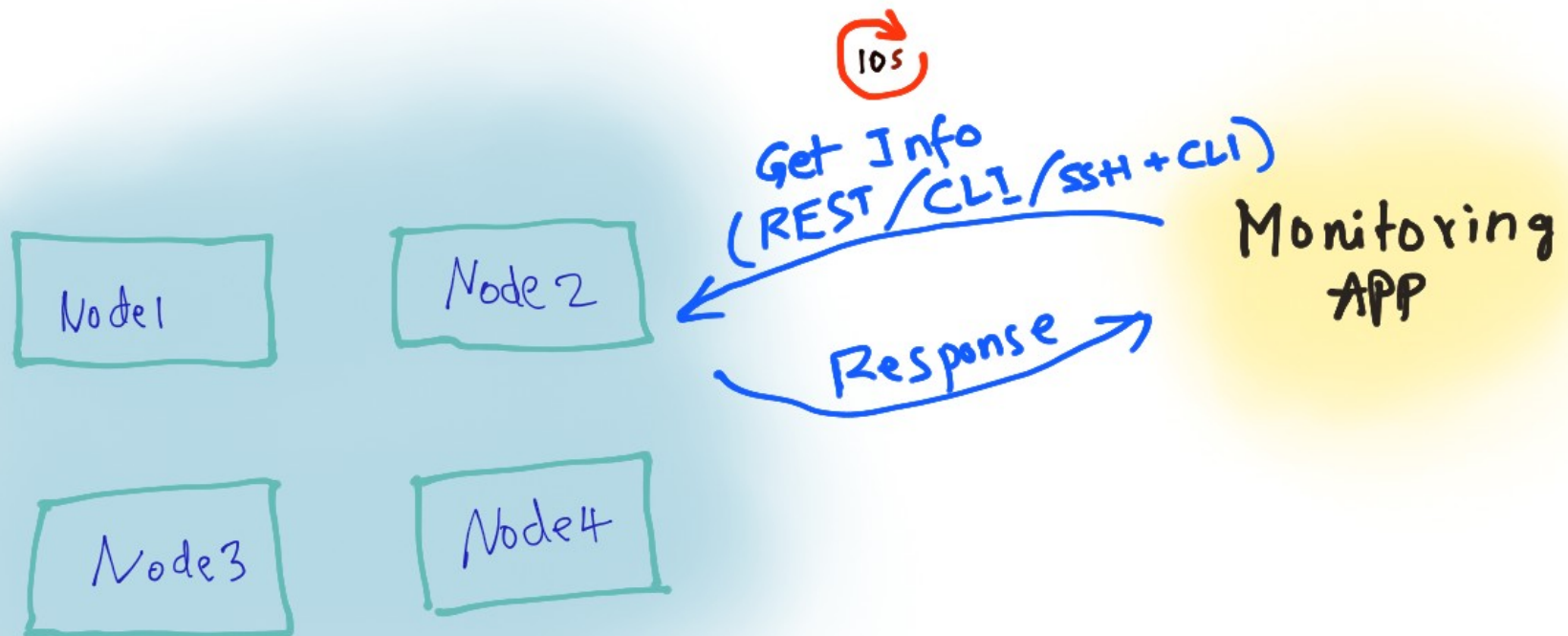
Node4

Monitoring  
APP

# Without Events APIs



# Without Events APIs

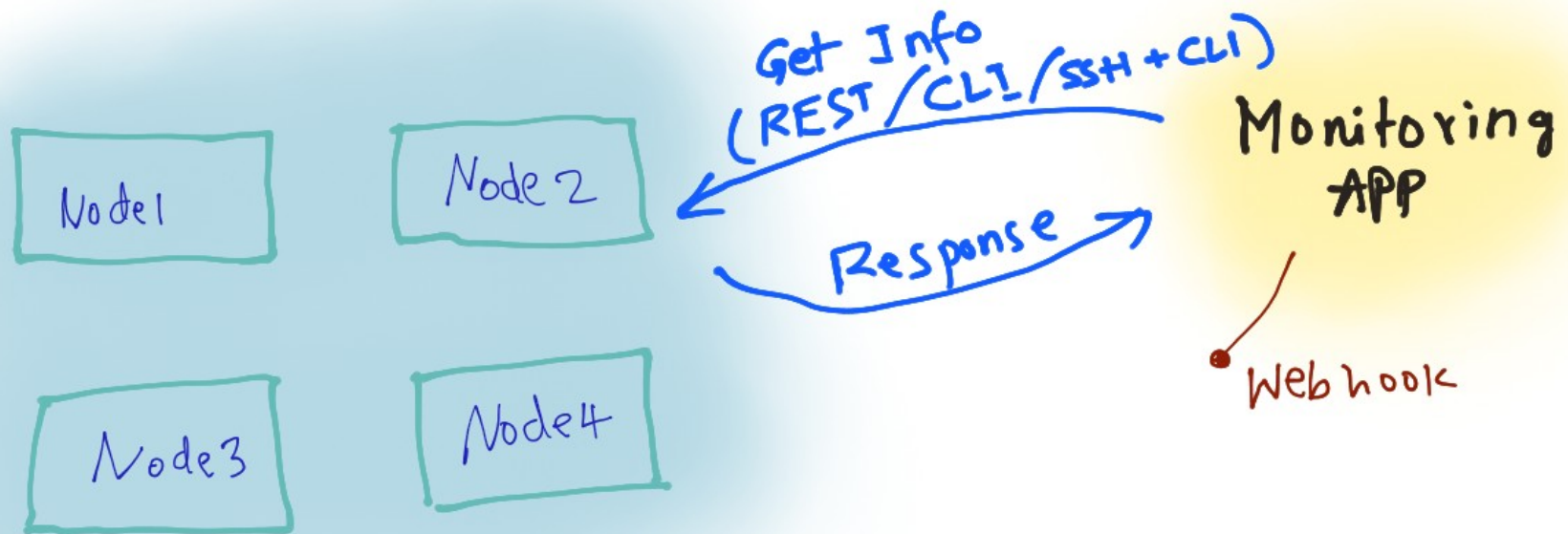


# Demo

Monitoring Without Events APIs

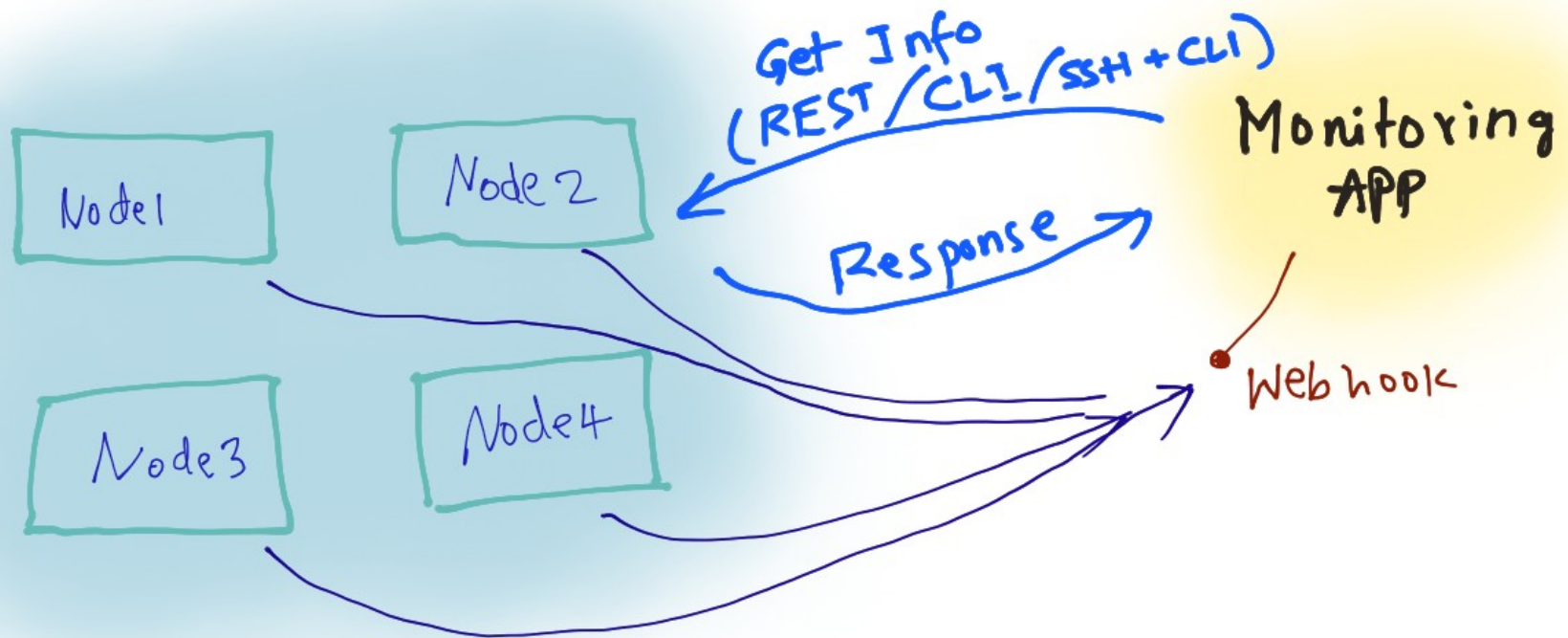


# With Events APIs



# With Events APIs

`gluster-eventsapi webhook-add <URL>`



# Demo

Effective Monitoring using Events APIs

# How it works?

Node 1  
glusterd  
glusterfsd  
gsyncd

Node 2  
glusterd  
glusterfsd  
gsyncd

Node 3  
glusterd  
glusterfsd  
gsyncd

Node 4  
glusterd  
glusterfsd  
gsyncd

# How it works?

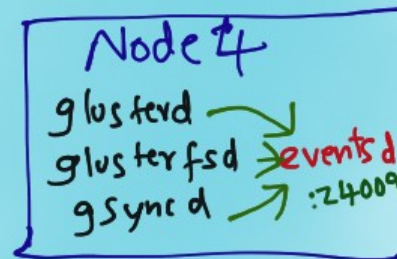
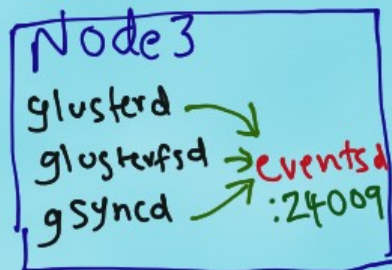
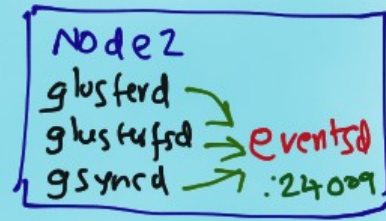
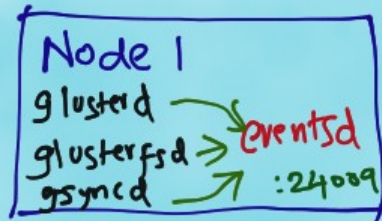
Node 1  
glusterd  
glusterfsd  
gsyncd  
eventsd :24009

Node 2  
glusterd  
glusterfsd  
gsyncd  
eventsd :24009

Node 3  
glusterd  
glusterfsd  
gsyncd  
eventsd :24009

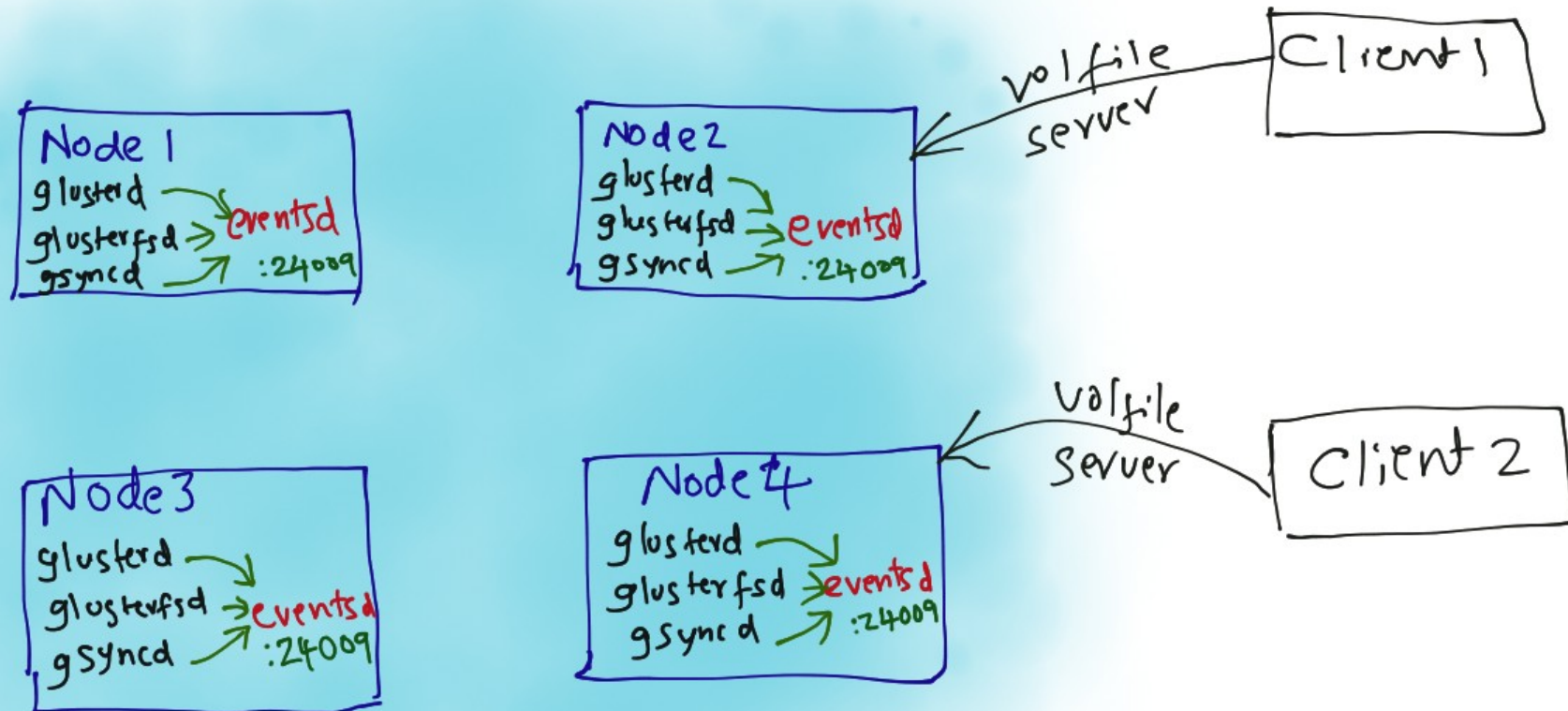
Node 4  
glusterd  
glusterfsd  
gsyncd  
eventsd :24009

# How it works?

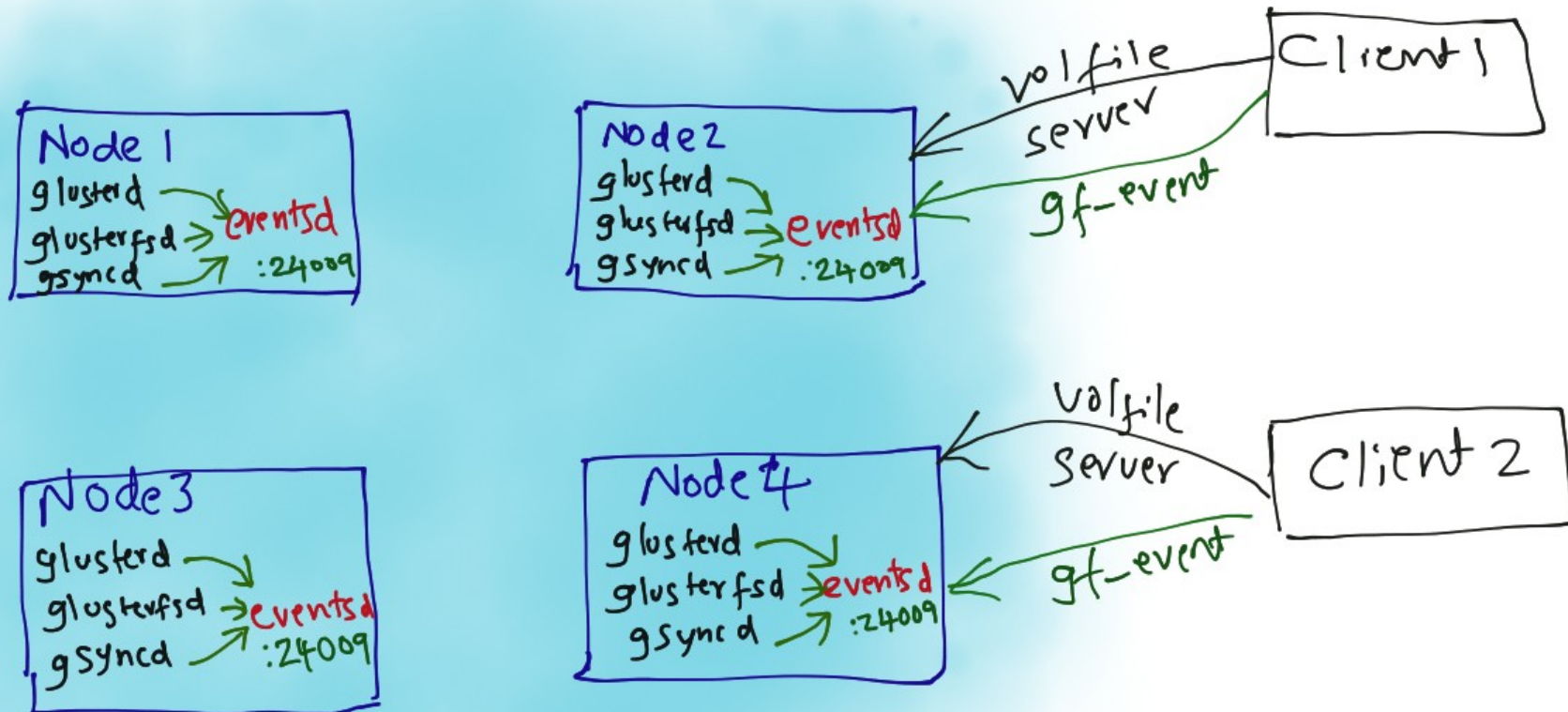




# How it works?

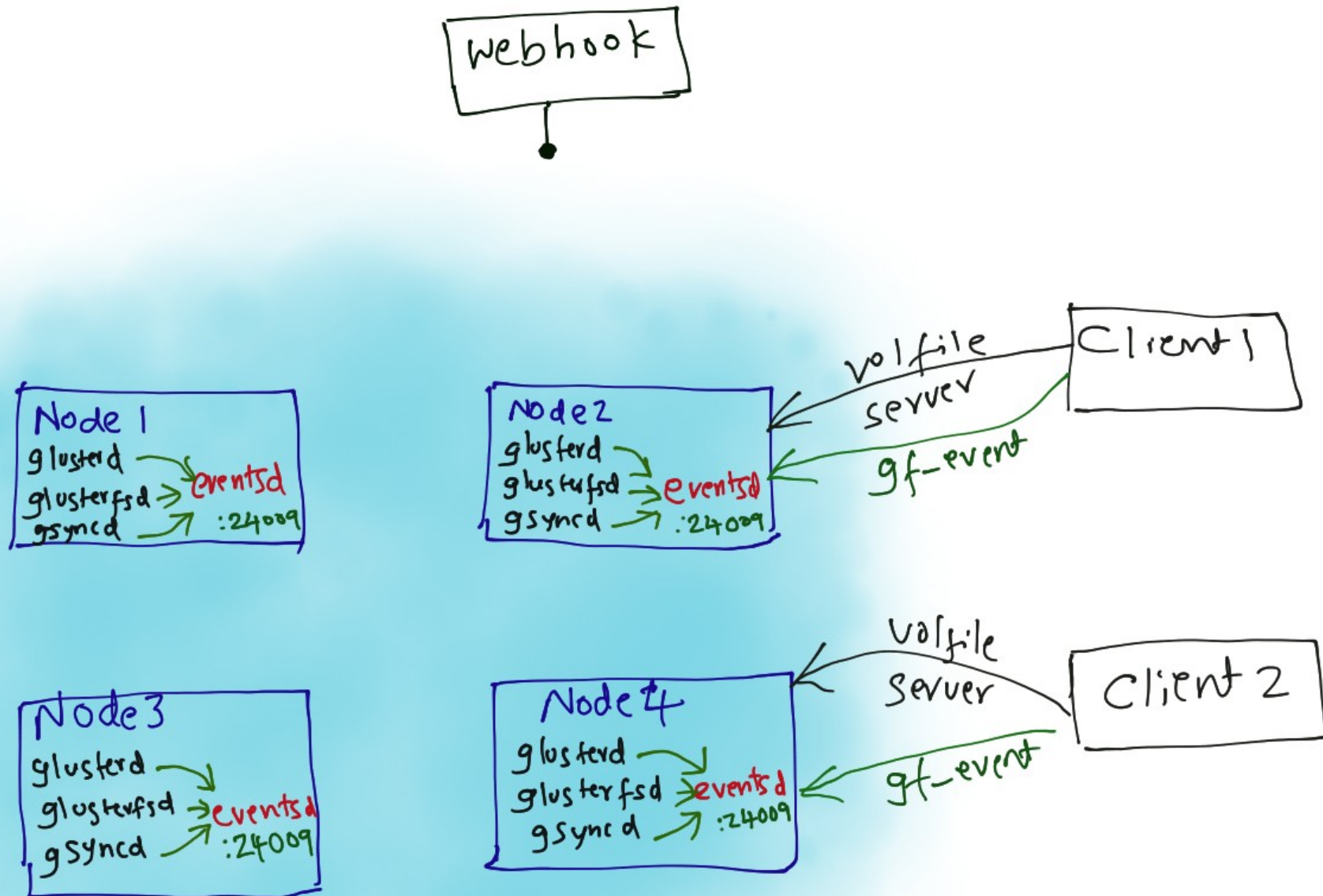


# How it works?

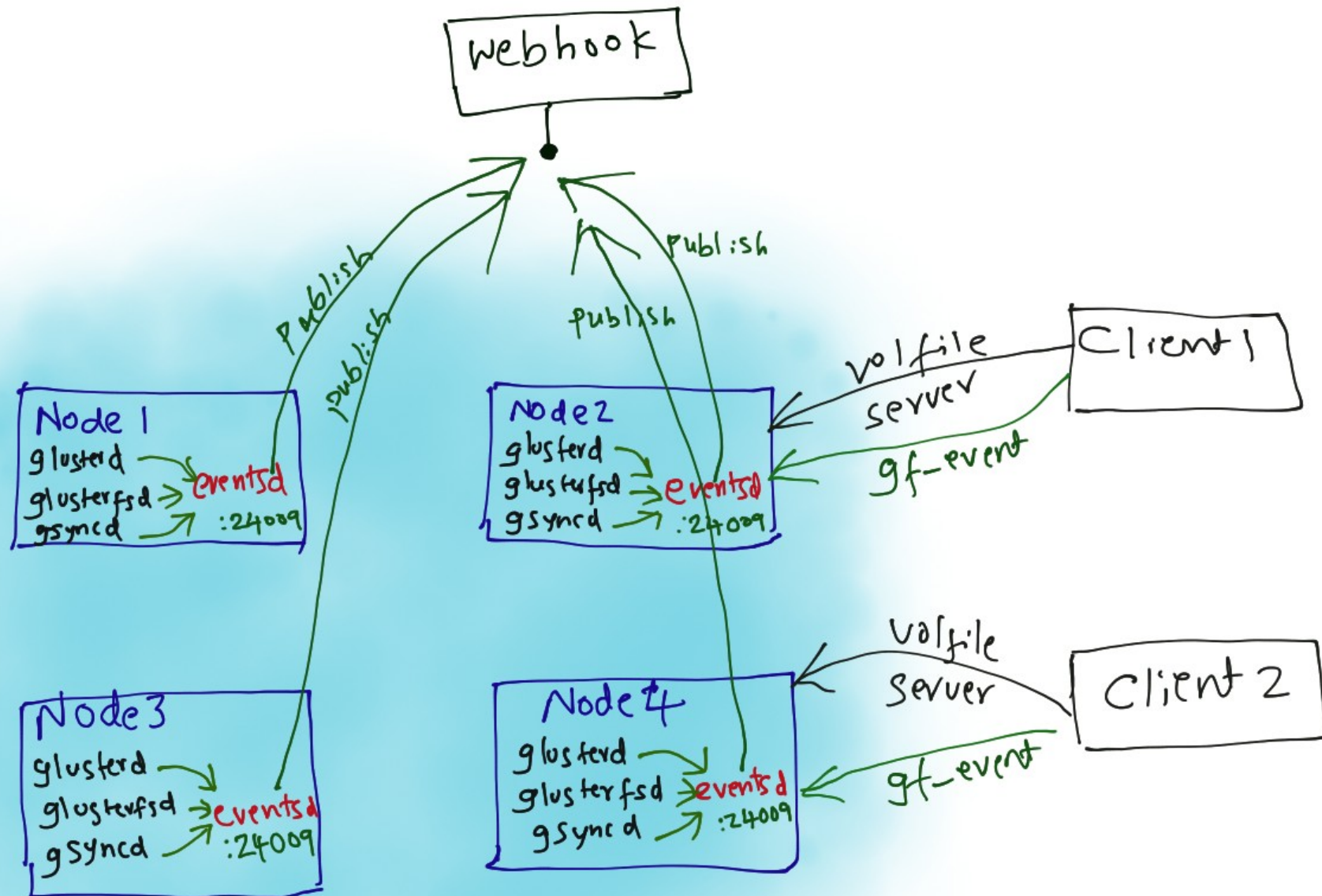




# How it works?



# How it works?



gluster-eventapi webhook-add <URL>

# Future Plans

- Integrate with next generation Gluster Management – glusterd2
- More ways to consume events, Websockets, SNMP traps, dbus message etc
- Facility to filter events
- Integration with external monitoring tools

# Questions?

- Documentation:  
<http://gluster.readthedocs.io/en/latest/Administrator%20Guide/Events%20APIs/>
- 10 minutes introduction to Gluster Eventing Feature  
<http://aravindavk.in/blog/10-mins-intro-to-gluster-eventing/>
- Effective Gluster Monitoring using Events APIs  
<http://aravindavk.in/blog/effective-gluster-monitoring-eventsapis/>
- Gluster Geo-replication Dashboard Experiment  
<http://aravindavk.in/blog/gluster-georep-dashboard-experiment>