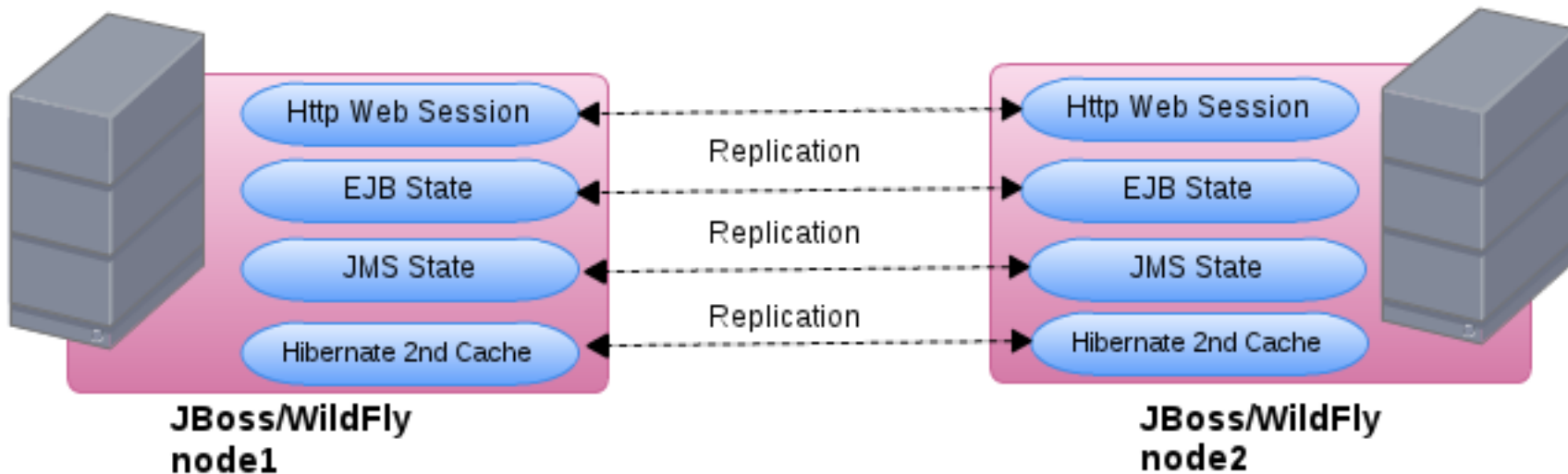# JBoss Cluster Overview for GSS
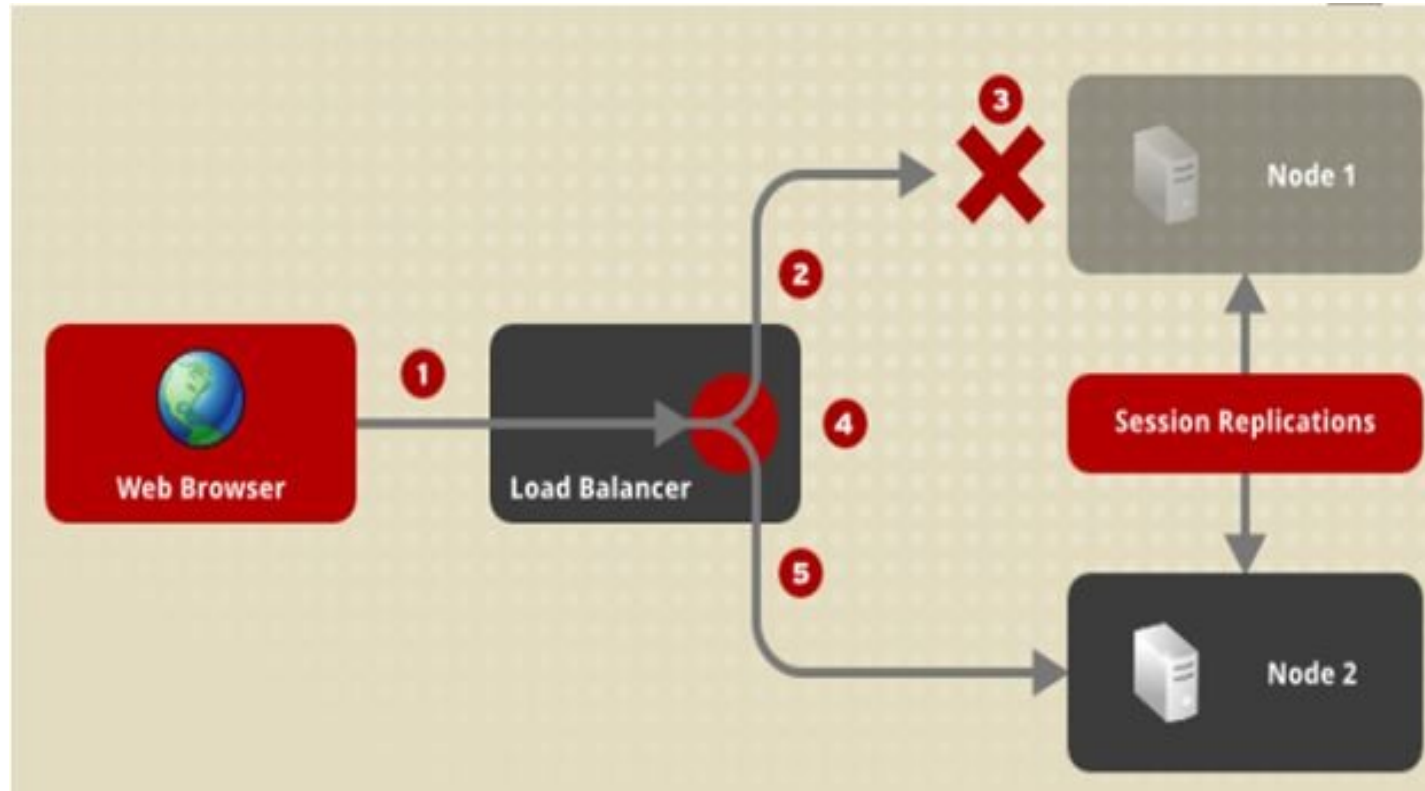
Scope of today's session

- Objective & Warming Up
- Cluster core framework – JGroups
- JPA Application Cluster
- HornetQ Messaging Cluster
- Web Application Cluster
- JBoss XPaaS, Cluster JBoss on Paas(if have time)

Objective & Warming Up

- JEE Container(JBoss) & JEE
  - Data & JPA
  - Asynchronous,Distributed & JMS, EJB
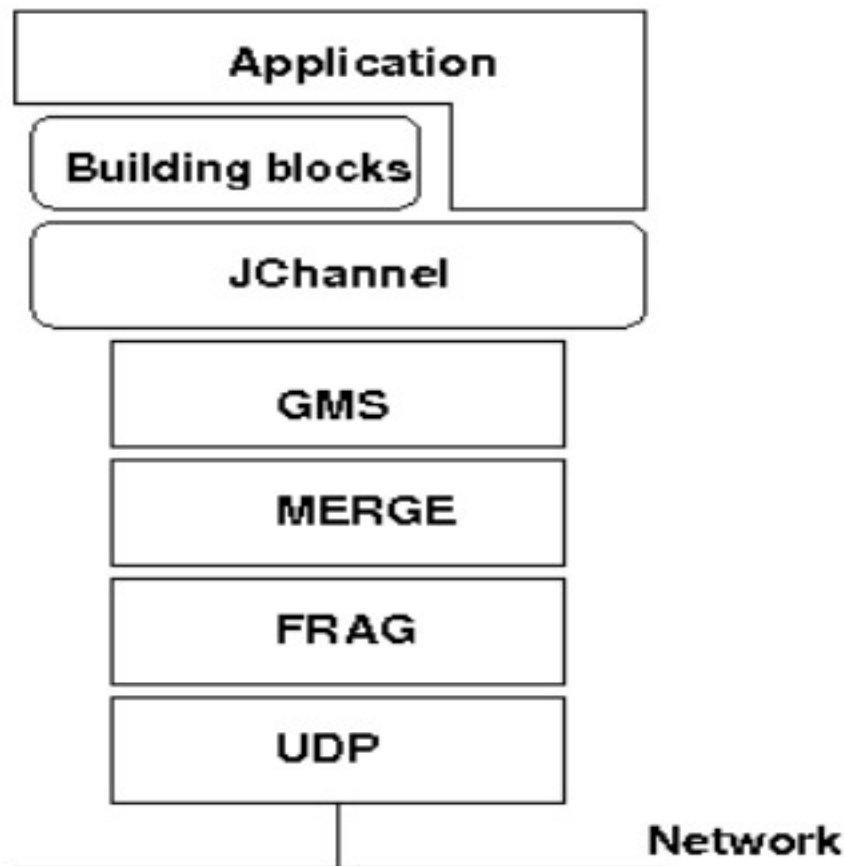 - Web Application
- Cluster

Objective & Warming Up

- ## Load Balancer
  - Httpd + mod_cluster/mod_jk/mod_proxy
- ## Replication
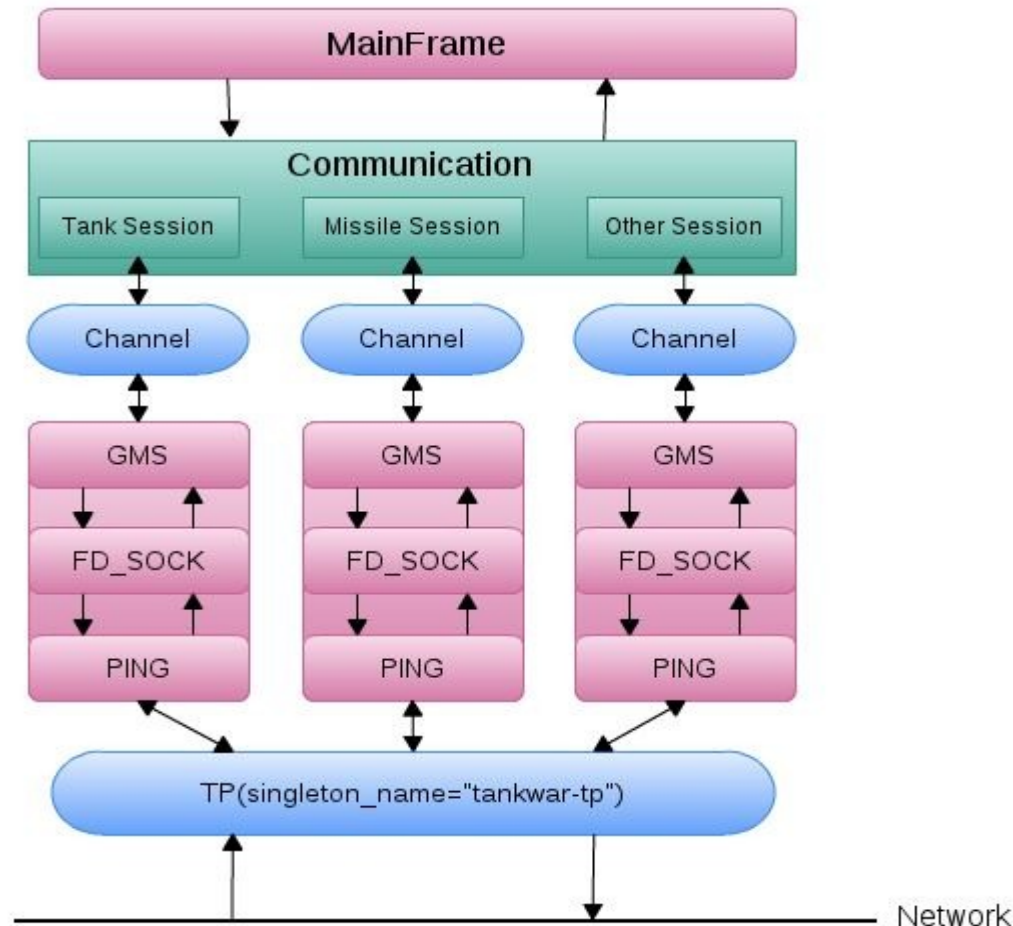 - JGroups,JBossCache, Infinispan

Cluster core framework – JGroups

- JGroups
  - Reliable messaging(one-to-many,one-to-one)
  - Flexible Protocol Stack(application requirements and network characteristics)
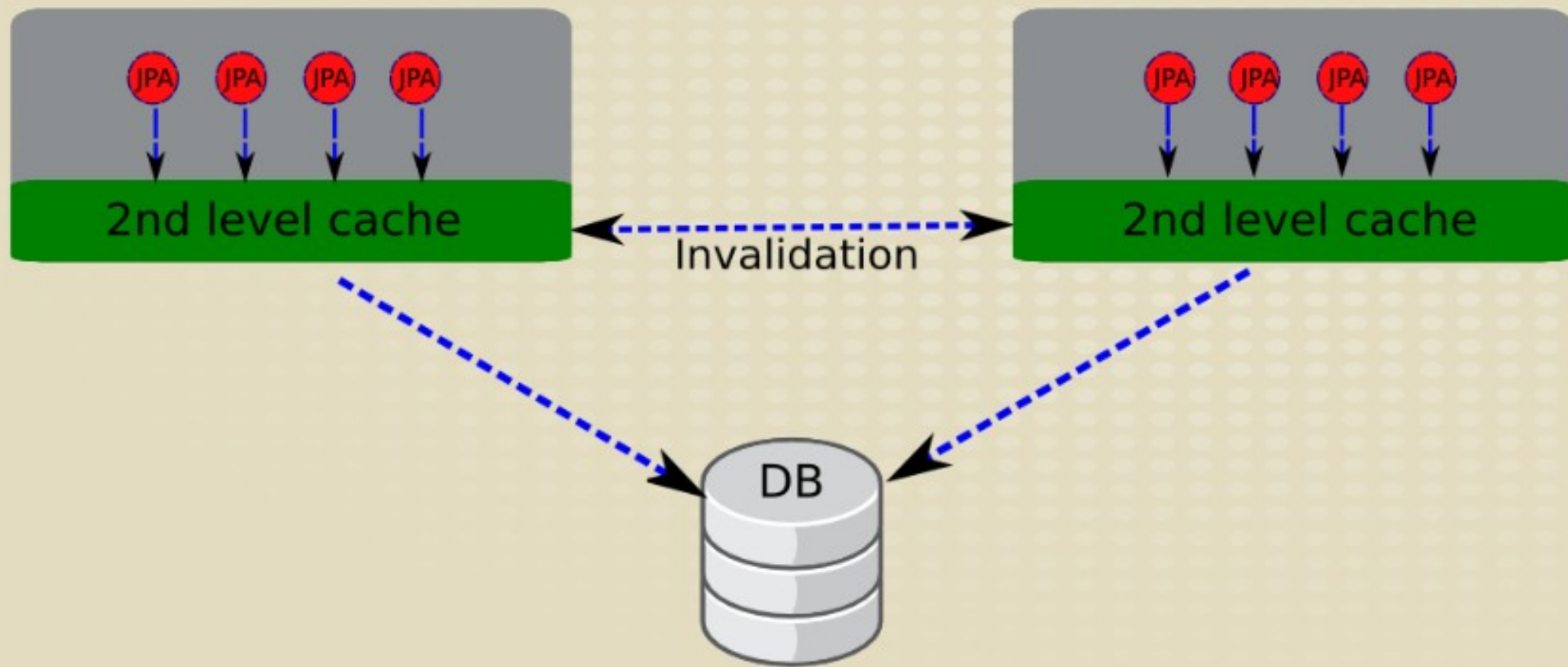
- Tank War Game & JBoss Cluster

- Run
  - ./tankwar.sh -n node1
  - ./tankwar.sh -n node2 isGood

Cluster core framework – JGroups

- More about JGroups
  - http://www.jgroups.org/
  - https://github.com/kylinsoong/cluster
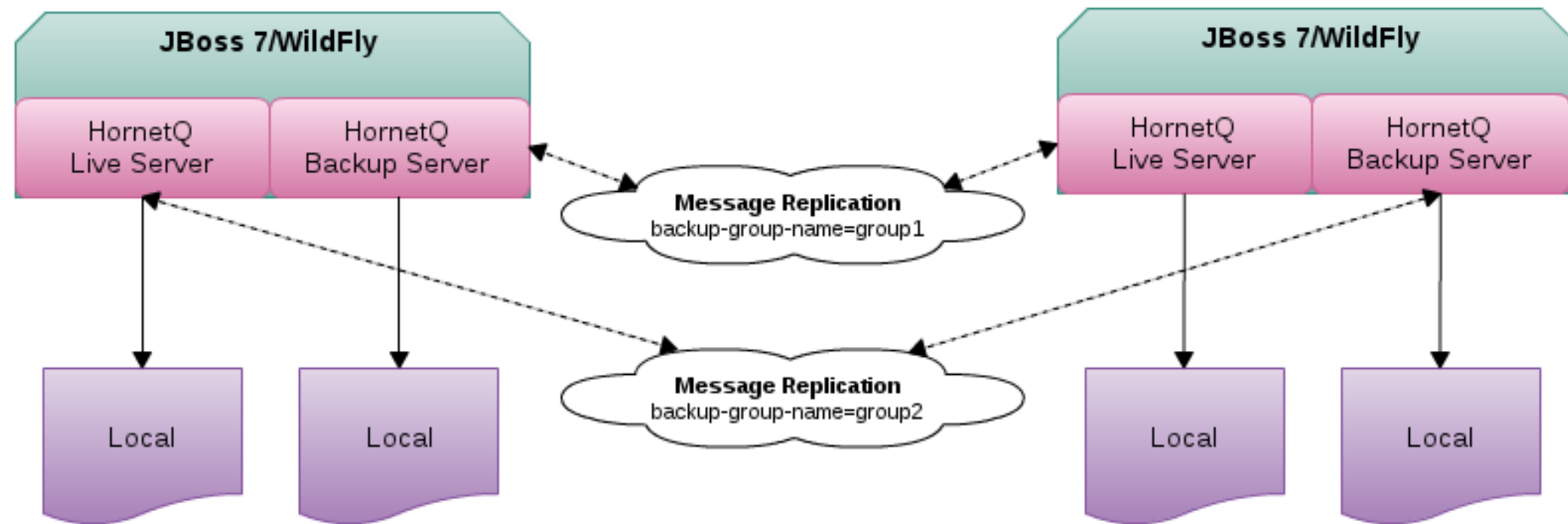 - Bela Ban's JGroups Manual 翻译

JPA Application Cluster

- Invalidation
  - ./dataGrid.sh -c infinispan-invalidation.xml
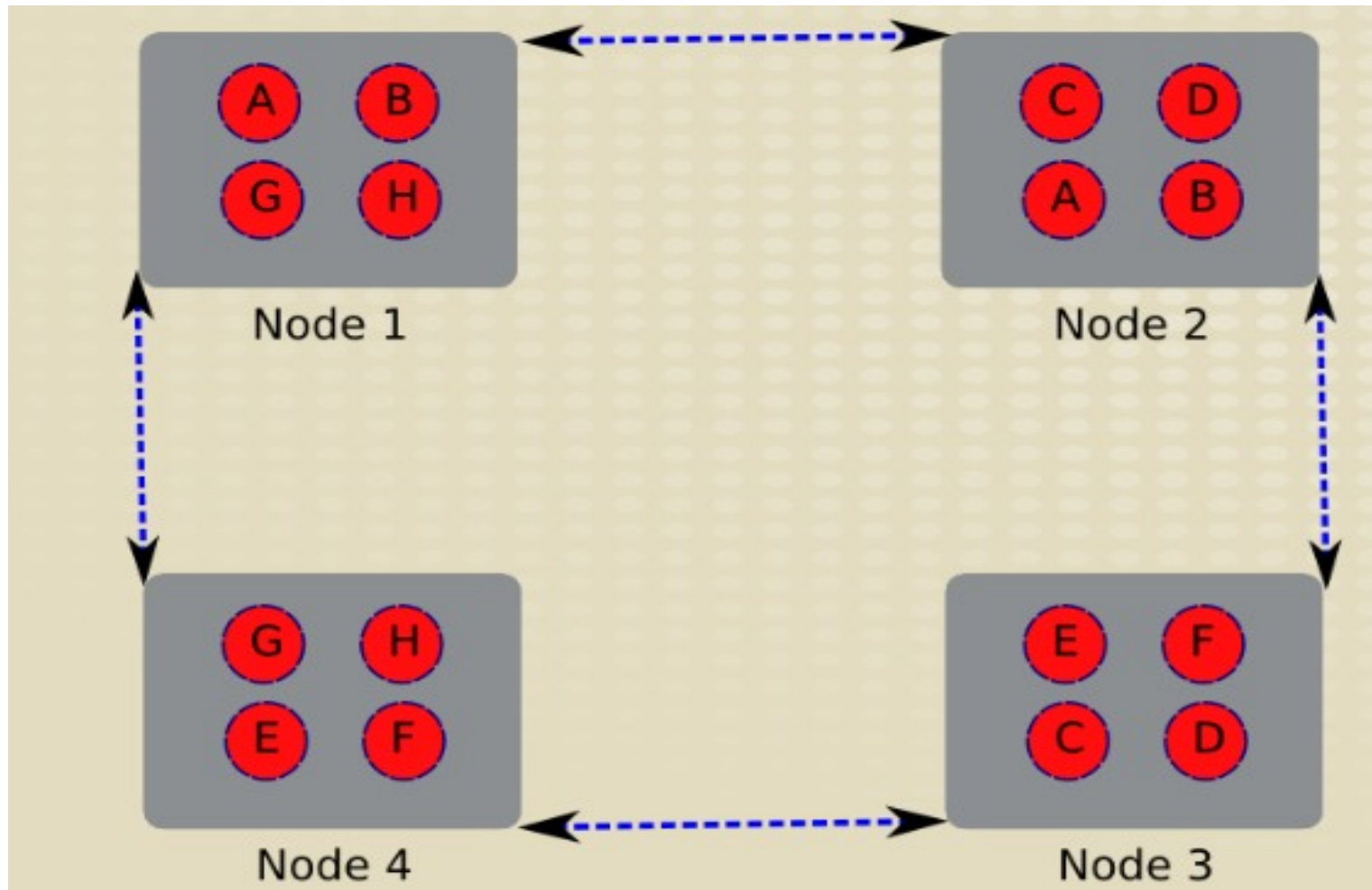
HornetQ Messaging Cluster

- ■ Replication
  - ● ./dataGrid.sh -c infinispan-replication.xml

Web Application Cluster

- Large Web Application cluster - Distribution

- Distribution
  - ./dataGrid.sh -c infinispan-distribution.xml

Web Application Cluster

- Demo
    - Apache httpd + mod_cluster + JBoss
    - Apache httpd + mod_jk + JBoss
    - Apache httpd + mod_proxy + JBoss

If Have Time

- JBoss Cluster on Paas(OpenShift, JBoss xPaas)
- The underlying for other language cluster(scala)
- Github
    - https://github.com/kylinsoong
- CSDN Blog
    - http://blog.csdn.net/kylinsoong/