The Way Of JBoss Big Data

jGroups JBossCache Infinispan

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Agenda

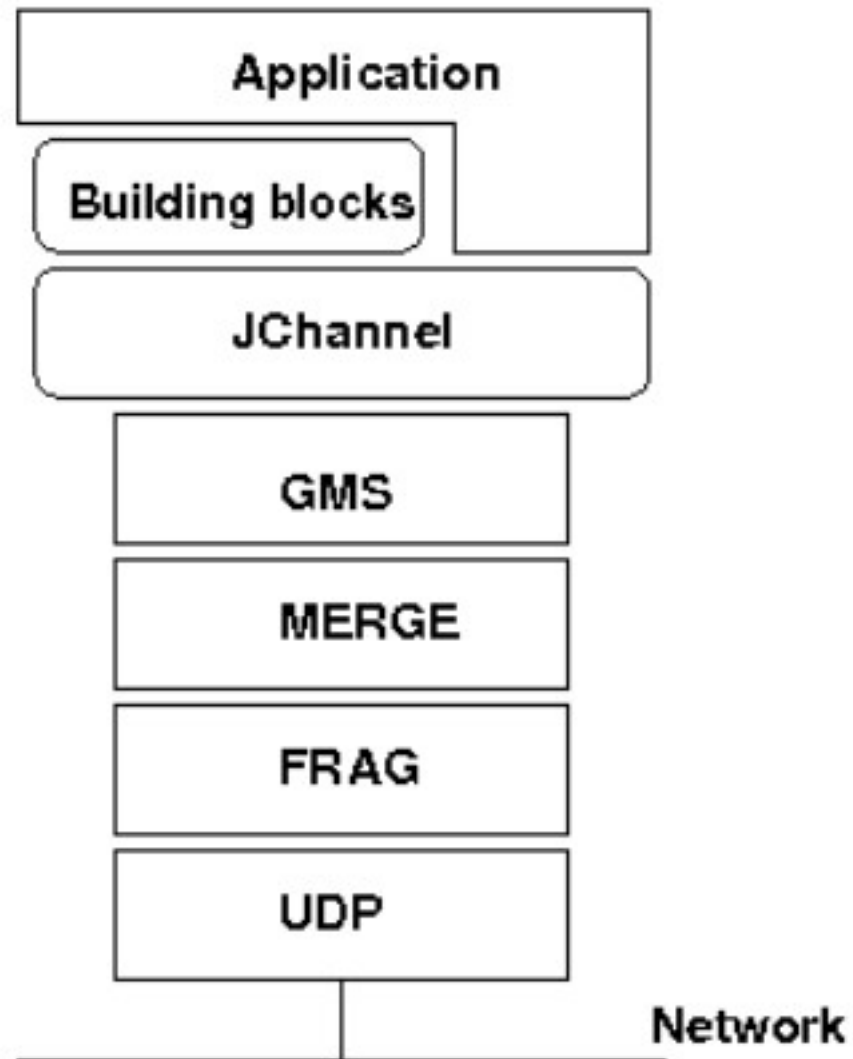- jGroups

- JBossCache

- Infinispan

jGroups Introduction

- JGroups is a toolkit for reliable multicast communication

- JGroups is a mature library, 50+ release

jGroups Architecture

jGroups Chat Demo

```
JChannel channel = new JChannel();
channel.setName("node1");
channel.setReceiver(ReceiverAdapter);
channel.connect("ChatDemo");
channel.send(msg);
```

```
JChannel channel = new JChannel();
channel.setName("node2");
channel.setReceiver(ReceiverAdapter);
channel.connect("ChatDemo");
channel.send(msg);
```

./chat.sh -n node1
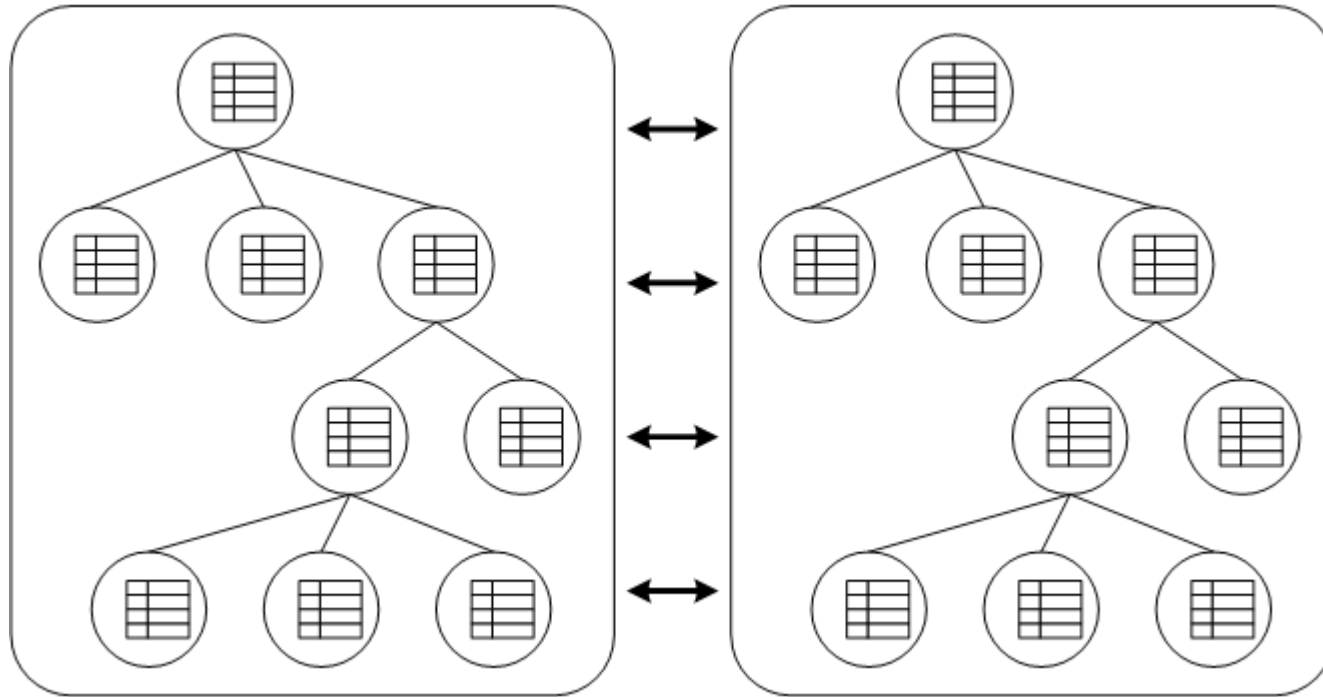
./chat.sh -n node2

JBossCache Introduction

- JBoss Cache is a tree-structured, clustered, transactional cache.

- Base on jGroups

- Usage

  - JBoss cluster(Web, EJB, JMS, etc)

- 2 way to run
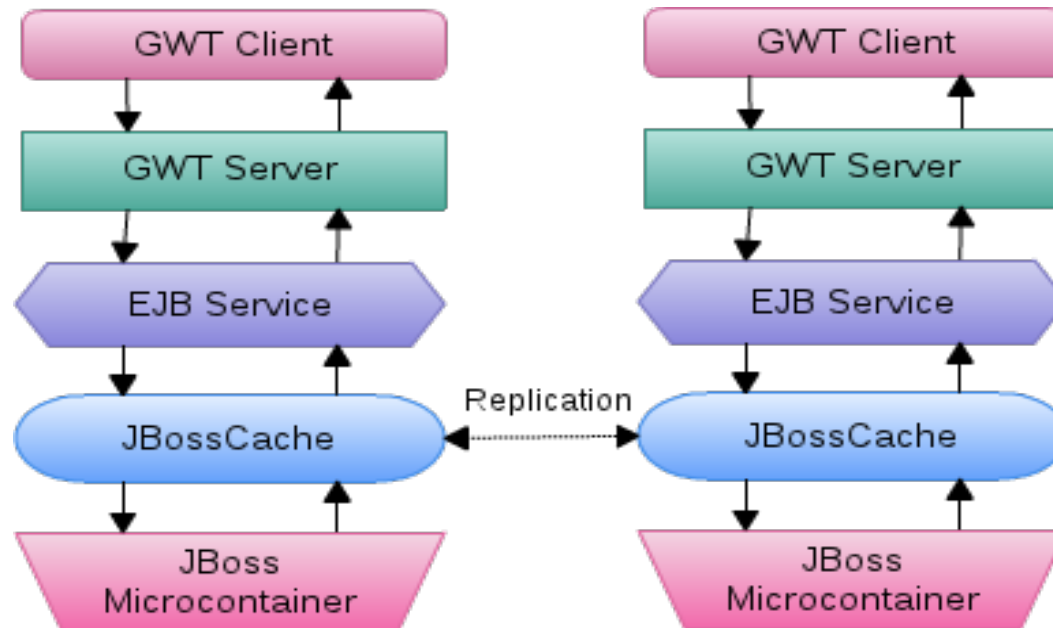
  - Standalone

  - Container

JBossCache Architecture

- Node, root
- Fqn

JBossCache Replication Demo

- Customize JBossCache(deploy/cluster/jboss-cache-manager.sar/META-INF/jboss-cache-manager-jboss-beans.xml)

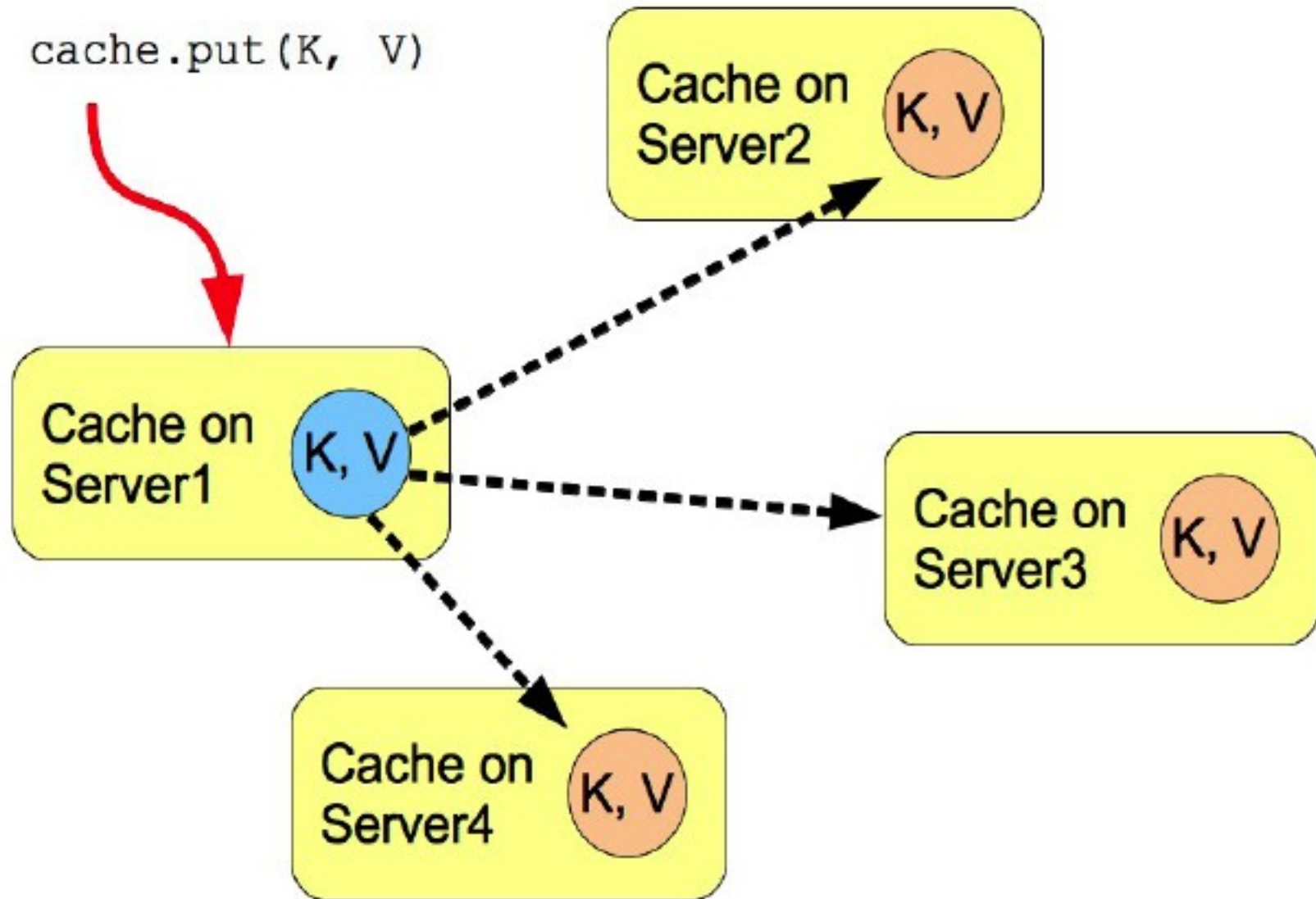- Deploy Demo to JBoss(-Djboss.service.binding.set=ports-01)

- Test(http://localhost:8080/jbosscache/)

Infinispan Introduction

- Transactional in-memory key/value NoSQL datastore

- Distributed data grid platform
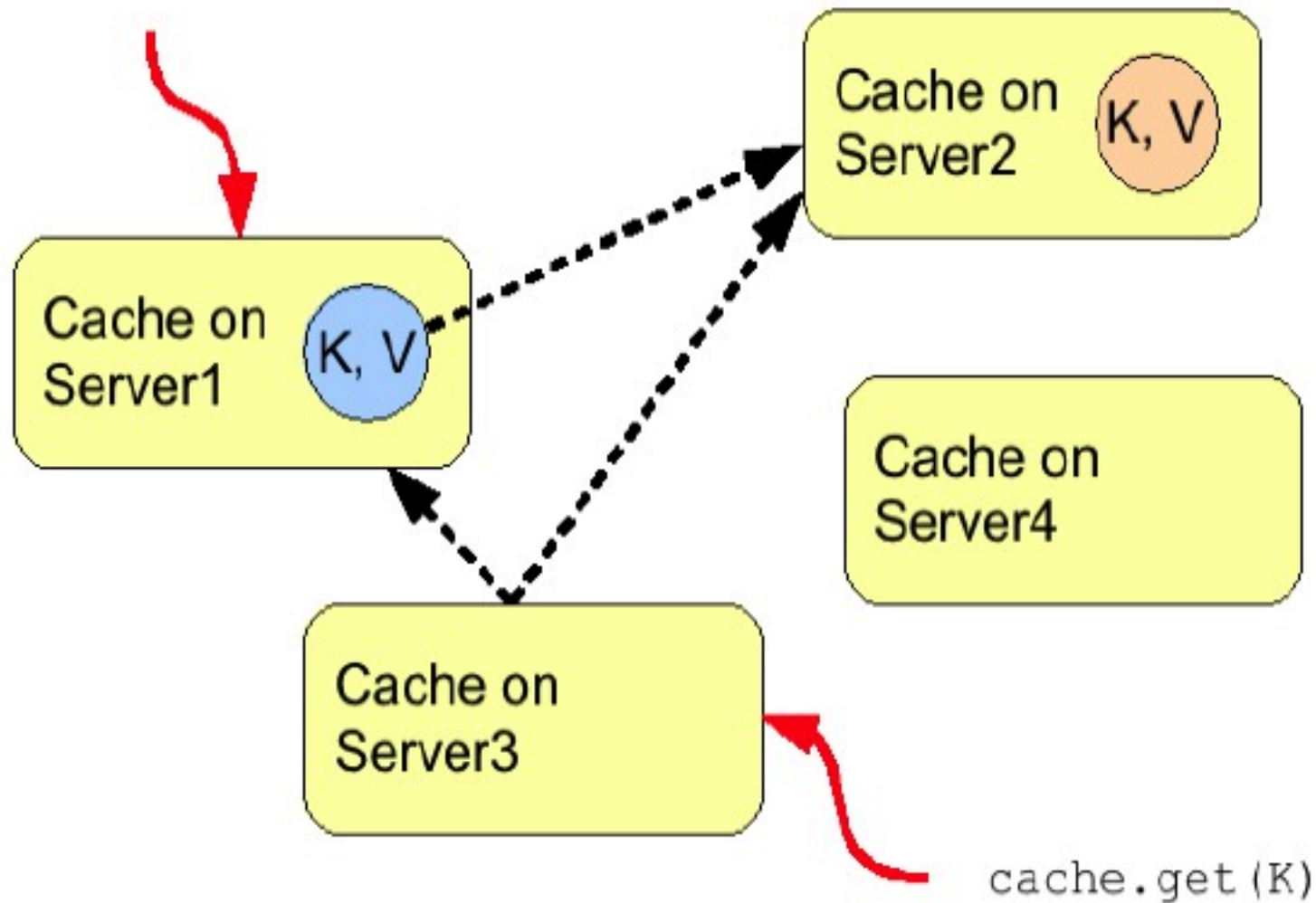
- The 2nd generation JBossCache
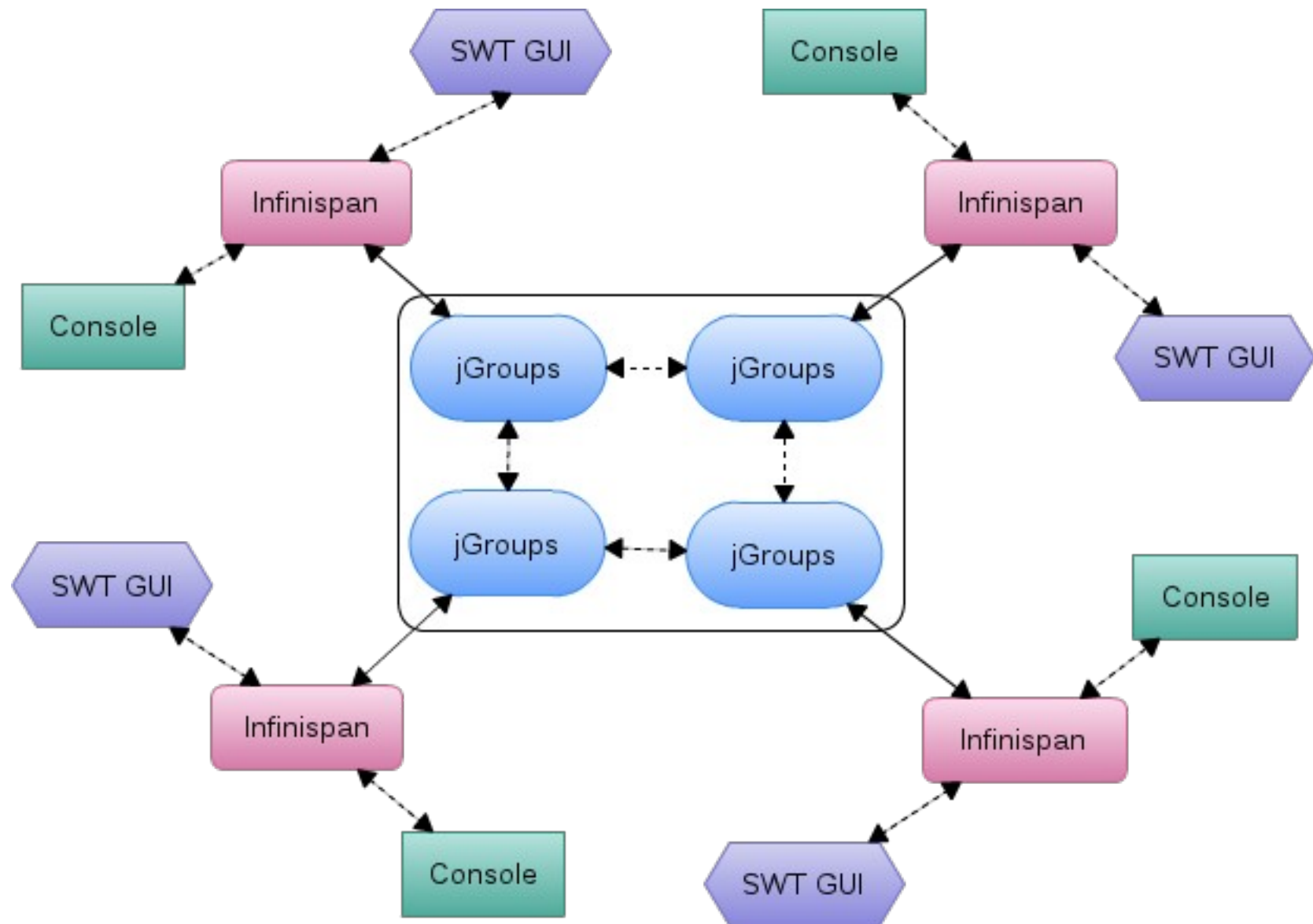
- JSR 107, JSR 347

Infinispan Architecture

Infinispan Architecture

Infinispan Distribution Demo

Infinispan Distribution Demo

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


./dataGrid.sh -c infinispan-distribution.xml -console
```

Thanks