## ****安装需要的依赖包****

[root@localhost ~]# yum install gcc gcc-c++ kernel-devel automake autoconf libtool make wget tcl vim ruby rubygems unzip git -y

## 2. ****下载redis并安装****

[root@localhost src]# cd /usr/local/

[root@localhost local]# wget http://download.redis.io/releases/redis-4.0.1.tar.gz

[root@localhost local]# tar xzf redis-4.0.1.tar.gz

[root@localhost local]# cd redis-4.0.1

[root@localhost redis-4.0.1]# make

## 3. 创建集群需要的目录

mkdir -p /usr/local/cluster

cd /usr/local/cluster

mkdir –p /usr/local/cluster/7000

mkdir –p /usr/local/cluster/7001

mkdir –p /usr/local/cluster/7002

mkdir –p /usr/local/cluster/7003

mkdir –p /usr/local/cluster/7004

mkdir –p /usr/local/cluster/7005

## 4. 修改配置文件redis.conf

port 7000（7002,7003,7004,7005）

daemonize yes

dbfilename dump-700X.rdb

logfile "log-700X.txt"

cluster-enabled yes

cluster-config-file nodes\_700X.conf

cluster-node-timeout 5000

appendonly yes

appendfilename "appendonly\_700X.aof"

pidfile /var/run/redis\_700X.pid

这个配置文件分别拷贝到7000/7001/7002/7003/7004/7005节点目录。

## 5. 分别启动这6个redis实例

/usr/local/redis-4.0.1/src/redis-server ./7000/redis.conf

/usr/local/redis-4.0.1/src/redis-server ./7001/redis.conf

/usr/local/redis-4.0.1/src/redis-server ./7002/redis.conf

/usr/local/redis-4.0.1/src/redis-server ./7003/redis.conf

/usr/local/redis-4.0.1/src/redis-server ./7004/redis.conf

/usr/local/redis-4.0.1/src/redis-server ./7005/redis.conf

并查看是否成功：ps -ef|grep redis

## 6. 执行redis的创建集群命令创建集群

[root@localhost cluster]# cd /usr/local/redis-4.0.1/src

[root@localhost src]# ./redis-trib.rb  create --replicas 1 127.0.0.1:7000 127.0.0.1:7001 127.0.0.1:7002 127.0.0.1:7003 127.0.0.1:7004 127.0.0.1:7005

到这一步因为前面第1步装了依赖包，未提示ruby和rubygems的错误，但还是会报错，提示不能加载redis，是因为缺少redis和ruby的接口，使用gem 安装  
错误内容：  
/usr/lib/ruby/site\_ruby/1.8/rubygems/custom\_require.rb:31:in `gem\_original\_require': no such file to load -- redis (LoadError)  
        from /usr/lib/ruby/site\_ruby/1.8/rubygems/custom\_require.rb:31:in `require'  
        from ./redis-trib.rb:25  
解决：gem install redis

还可能会提示ruby版本太低，需要安装高版本。

wget https://cache.ruby-china.org/pub/ruby/ruby-2.3.1.tar.gz

tar xzvf ruby-2.3.1.tar.gz

cd ruby-2.3.1

./configure –prefix=/usr/local/ruby

make && make install

【注意】--replicas 1代表1个slave的意思，6379是客户端的连接端口，6379+10000=16379是集群内部的通信端口，必须要开启。

## 7. 重新执行创建集群的命令

。。。。。。。

[OK] All nodes agree about slots configuration.

>>> Check for open slots...

>>> Check slots coverage...

[OK] All 16384 slots covered.

## 8. ****测试集群****

[root@iZuf6h90t5awxwr3uqp6f0Z src]# ./redis-cli -c -p 7000

127.0.0.1:7000> set username xjs

-> Redirected to slot [14315] located at 127.0.0.1:7002

OK

[root@iZuf6h90t5awxwr3uqp6f0Z ~]# /usr/local/redis-4.0.1/src/redis-cli -c -p 7005

127.0.0.1:7005> get username

-> Redirected to slot [14315] located at 127.0.0.1:7002

"xjs"

127.0.0.1:7001> cluster node #查看集群的状态

(error) ERR Wrong CLUSTER subcommand or number of arguments

127.0.0.1:7001> cluster nodes

3c4b6483135cc38650a31c331eecc997b6e88190 127.0.0.1:7002@17002 master - 0 1504779228400 3 connected 10923-16383

c25ea8b61a8aa1d3ffefa4de38ac841f8cc6c358 127.0.0.1:7004@17004 slave 57f4e347168da74ca684ebf36a28a2fc09083ac2 0 1504779228000 5 connected

fdc803212f1cf652f24ff829e577cd3d1910287c 127.0.0.1:7003@17003 master - 0 1504779229000 7 connected 0-5460

57f4e347168da74ca684ebf36a28a2fc09083ac2 127.0.0.1:7001@17001 myself,master - 0 1504779227000 2 connected 5461-10922

458c8db15585fa4ecc487a0d532990293a3451a2 127.0.0.1:7000@17000 slave fdc803212f1cf652f24ff829e577cd3d1910287c 0 1504779228600 7 connected

7fff66e34ca2087602f46dd49d3e9dd20d7658e7 127.0.0.1:7005@17005 slave 3c4b6483135cc38650a31c331eecc997b6e88190 0 1504779229401 6 connected

127.0.0.1:7001>

参考：

<http://blog.csdn.net/nuli888/article/details/52134117>

<http://www.cnblogs.com/feiyun126/p/7248989.html>

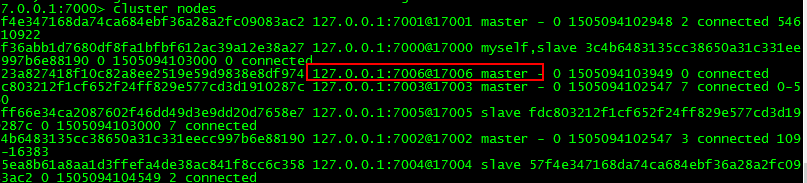
## 9.运维相关

参考：<https://redis.io/topics/cluster-tutorial>

### 添加一个master节点7006：

1. 启动一个新节点./redis-server /usr/local/cluster/7006/redis.conf
2. ./redis-trib.rb add-node 127.0.0.1:7006 127.0.0.1:7000

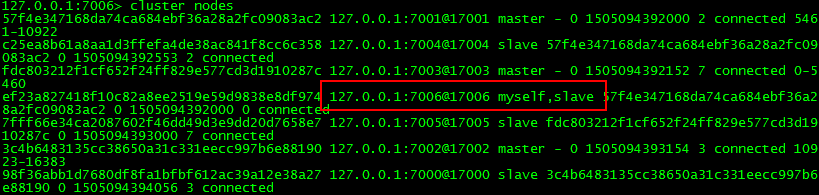
127.0.0.1:7006代表新的节点的ip和端口，127.0.0.1:7000代表老的集群



### 修改7006为7001的slave：

（1）进入7006：./redis-cli -c -p 7006

（2）cluster replicate 57f4e347168da74ca684ebf36a28a2fc09083ac2（7001的id）



### 删除节点7006：

（1）./redis-trib.rb del-node 127.0.0.1:7000 ef23a827418f10c82a8ee2519e59d9838e8df974

127.0.0.1:7000代表集群的ip和端口，ef23a827418f10c82a8ee2519e59d9838e8df974是要删除的节点的id

### 添加一个slave节点7006：

1. 启动7006节点
2. ./redis-trib.rb add-node --slave --master-id 3c4b6483135cc38650a31c331eecc997b6e88190 127.0.0.1:7006 127.0.0.1:7000

--master-id 3c4b6483135cc38650a31c331eecc997b6e88190是master的id

127.0.0.1:7006是新加入的节点的ip和端口

127.0.0.1:7000是集群的IP和端口