Install Redis

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Created on March 20th 2012

Updated on June 2015

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## Install Redis

a.   Download and install master

*#cd /root/source*

*# wget*[*http://download.redis.io/releases/redis-3.0.2.tar.gz*](http://download.redis.io/releases/redis-3.0.2.tar.gz)

*#cd redis-3.0.2*

*#make sure gcc is installed 🡪 if not 🡪 yum install gcc*

*#make*

*#mkdir -p /usr/local/redis/bin*

*#mkdir –p /usr/local/redis/etc*

*#cd src*

*#cp redis-server redis-cli redis-benchmark /usr/local/redis/bin*

*#cd /usr/local/redis/etc/*

*#cp opt/redis-3.0.2/redis.conf redis.conf*

*#mkdir –p /usr/local/redis/logs*

*#mkdir –p /data/redis*

*# vi /usr/local/redis/etc/redis.conf*=======================================  
*daemonize yes  
pidfile /var/run/redis.pid  
port 6379  
timeout 0  
logfile /usr/local/redis/logs/redis.log  
dir /data/redis/  
#slaveof <masterip> <masterport>  
  
maxmemory 314572800  
appendonly no  
slave-read-only yes*

=======================================  
*#/usr/local/redis/bin/redis-server /usr/local/redis/etc/redis.conf*

*#ps –ef | grep redis*

*添加到开机启动  
vi /etc/rc.d/rc.local  
/usr/local/redis/bin/redis-server /usr/local/redis/etc/redis.conf*

b.    Install slave

Install redis on another machine following the steps above.

Port 6381 (only change the port on the same machine with master, use 6379 as default)

slaveof xxx.xxx.xxx.xxx 6379

*slave-read-only no (check this!!!! Only when slave is rewritable, php session can work)*

./redis-server /usr/local/redis/etc/redis.conf

## Install Redis cluster

1. 在3台集群机上分别安装2个redis服务，先安装一台，复制到其他三台

mkdir –p /usr/local/redis/bin

mkdir –p /usr/local/redis/etc

mkdir –p /usr/local/redis/logs

mkdir –p /usr/local/redis-replica/bin

mkdir –p /usr/local/redis-replica/etc

mkdir –p /usr/local/redis-replica/logs

mkdir –p /data/redis

mkdir –p /data/redis-replica

cd /opt/source/redis-3.0.2/src/

cp *redis-server redis-cli redis-benchmark redis-trib.rb /usr/local/redis/bin*

cp *redis-server redis-cli redis-benchmark redis-trib.rb /usr/local/redis-replica/bin*

*#cp /opt/source/redis-3.0.2/redis.conf /usr/local/redis/etc/redis.conf*

配置：参照单个实例安装，再加上下面配置

port 6379 #不同目录，这里端口对应不同，replica对应的端口为6380

cluster-enabled yes #开启集群功能

cluster-config-file nodes.conf #节点配置文件，这个文件是服务启动时自己配置创建的

cluster-node-timeout 5000

appendonly yes

1. 启动6个实例

/usr/local/redis/bin/redis-server /usr/local/redis/etc/redis.conf

/usr/local/redis-replica/bin/redis-server /usr/local/redis-replica/etc/redis.conf

ps aux|grep redis 查看进程

1. 创建集群

yum install ruby

Ruby 1.9.2版本默认已安装Ruby Gem，如果你的版本低于这个, 安装gem 需要ruby的版本在 1.8.7 以上，默认的centos5 上都是1.8.5 版本，所以首先你的升级你的ruby ，有两种方式，yum 和 tar包，

如果你直接用yum的话，一般是装不上的，得先做些准备，首先添加一个源

rpm -ivh <http://yum.puppetlabs.com/el/5/products/x86_64/puppetlabs-release-5-6.noarch.rpm>

yum install ruby ruby-devel rubygems rpm-build

gem install redis

/usr/local/redis/bin/redis-trib.rb create --replicas 1 192.168.0.229:6379 192.168.0.229:6380 192.168.0.230:6379 192.168.0.230:6380 192.168.0.231:6379 192.168.0.231:6380

--replicas 1 表示每个主节点下有一个从节点

1. 测试

**./redis-cli -c -h 192.168.0.229 -p 6380**

192.168.0.229:6380> set name roger.xia

-> Redirected to slot [5798] located at 192.168.0.230:6379

OK

192.168.0.230:6379> exit

[root@sh-192-168-0-229 bin]# ./redis-cli -c -h 192.168.0.229 -p 6379

192.168.0.229:6379> get name

-> Redirected to slot [5798] located at 192.168.0.230:6379

"roger.xia"

192.168.0.230:6379> exit

[root@sh-192-168-0-229 bin]# ./redis-cli -c -h 192.168.0.231 -p 6379

192.168.0.231:6379> get name

-> Redirected to slot [5798] located at 192.168.0.230:6379

"roger.xia"

192.168.0.230:6379> exit

[root@sh-192-168-0-229 bin]# ./redis-cli -c -h 192.168.0.230 -p 6379

192.168.0.230:6379> get name

"roger.xia"

**查看cluster**

./redis-cli -h 192.168.0.230 -p 6379 cluster nodes

52a054aee87b8d6da7ae097e3a67edefac2d9406 192.168.0.229:6380 slave ab0b1bd2b3826cd86c105fc1503f39a009fe9edf 0 1430315801253 2 connected

effe3ce41f3a889db74b9cba252b8a142c2bc04c 192.168.0.231:6380 slave 6dba89e081bf4f5814565d9446cff9e6dd90f6ce 0 1430315800253 6 connected

67eb42d24f057fddec6901470714837c3ae5165e 192.168.0.230:6380 slave f1fb0924752ca0062ed26a1c0c11cddf6e7289c7 0 1430315799252 5 connected

6dba89e081bf4f5814565d9446cff9e6dd90f6ce 192.168.0.230:6379 myself,master - 0 0 3 connected 5461-10922

f1fb0924752ca0062ed26a1c0c11cddf6e7289c7 192.168.0.231:6379 master - 0 1430315799853 5 connected 0-5460

ab0b1bd2b3826cd86c105fc1503f39a009fe9edf 192.168.0.229:6379 master - 0 1430315800853 1 connected 10923-16383

1. 内核调优

echo never > /sys/kernel/mm/transparent\_hugepage/enabled

echo "vm.overcommit\_memory = 1" >> /etc/sysctl.conf

sysctl -p

1. 撰写redis配置文件（cp配置文件注意修改端口）

vim /etc/redis\_6300.conf

daemonize yes

port 6300

tcp-backlog 511

timeout 0

tcp-keepalive 0

loglevel notice

maxmemory 10gb

databases 16

dir /data/redis/6300

slave-serve-stale-data yes

loglevel notice

logfile "/data/redis/6300/redis\_6300.log"

#slave只读

slave-read-only yes

#not use default

repl-disable-tcp-nodelay yes

slave-priority 100

#打开aof持久化

appendonly yes

#每秒一次aof写

appendfsync everysec

#关闭在aof rewrite的时候对新的写操作进行fsync

no-appendfsync-on-rewrite yes

auto-aof-rewrite-min-size 64mb

lua-time-limit 5000

#打开redis集群

cluster-enabled yes

cluster-config-file /data/redis/6300/nodes-6300.conf

#节点互连超时的阀值（单位毫秒）

cluster-node-timeout 15000

#一个主节点在拥有多少个好的从节点的时候就要割让一个从节点出来给其他没有从节点或者从节点挂掉的主节点

cluster-migration-barrier 1

#如果某一些key space没有被集群中任何节点覆盖，最常见的就是一个node挂掉，集群将停止接受写入

cluster-require-full-coverage no

#部署在同一机器的redis实例，把auto-aof-rewrite搓开，防止瞬间fork所有redis进程做rewrite,占用大量内存

auto-aof-rewrite-percentage 80-100

slowlog-log-slower-than 10000

slowlog-max-len 128

notify-keyspace-events ""

hash-max-ziplist-entries 512

hash-max-ziplist-value 64

list-max-ziplist-entries 512

list-max-ziplist-value 64

set-max-intset-entries 512

zset-max-ziplist-entries 128

zset-max-ziplist-value 64

activerehashing yes

client-output-buffer-limit normal 0 0 0

client-output-buffer-limit slave 256mb 64mb 60

client-output-buffer-limit pubsub 32mb 8mb 60

hz 10

aof-rewrite-incremental-fsync yes

<http://mp.weixin.qq.com/s?__biz=MzA3MzYwNjQ3NA==&mid=400315209&idx=3&sn=4db6b96503aa8f9726907ba75aae7050&scene=1&srcid=1103Y4CzArBom16TiCDWnMsX&uin=Mjc5MzIyNzUyMg%3D%3D&key=04dce534b3b035eff7de63b963fae7de930bd68660ef81d173d2b539f43c954bc691270c80d30cdc00f34daab14721ca&devicetype=webwx&version=70000001&lang=zh_CN&pass_ticket=g9G0y1osdwiL511LcQKkn3WqWIV9IEX11ISC2c8T%2FPeJCAtTHrcfjKhXkX3deKVJ>