Redis3 + Linux7-64bit 安装及启动配置的简单介绍

88322511@qq.com
bigdatalyn
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Oracle Linux 7.4 安装

通过Oracle官方提供的vagrant box下载安装，步骤简单，不详细介绍

http://yum.oracle.com/boxes/

Oracle Linux 6.9 (8-FEB-2018) 367MB

Oracle Linux 7.4 (26-JAN-2018) 425MB 下载这个

示例配置虚拟机的文件

```
####################################################################
Vagrant.configure("2") do |config|
config.vm.box = "ol74"
config.vm.hostname = "oraclelinux7"
config.vm.provider "virtualbox" do |vb|
vb.memory = "4096"
config.vm.network :forwarded_port, guest: 1521, host: 1234
end
end
####################################################################
```

Redis的安装及启动配置

Redis的安装现在可以通过yum方式，也可以自行下载编译安装，下面介绍下载安装包make方式安装。

安装：（下载，解压，make...）

```
root@oraclelinux7:~# wget http://download.redis.io/releases/redis-3.0.6.tar.gz
--2018-03-07 14:34:46--  http://download.redis.io/releases/redis-3.0.6.tar.gz
Resolving cn-proxy.jp.oracle.com (cn-proxy.jp.oracle.com)... 10.188.53.53
Connecting to cn-proxy.jp.oracle.com (cn-proxy.jp.oracle.com)|10.188.53.53|:80... connected.
Proxy request sent, awaiting response... 200 OK
Length: 1372648 (1.3M) [application/x-gzip]
Saving to: redis-3.0.6.tar.gz
100%
[========================================================================================================
===============>] 1,372,648   799KB/s   in 1.7s

2018-03-07 14:34:51 (799 KB/s) - redis-3.0.6.tar.gz saved [1372648/1372648]
root@oraclelinux7:~#
root@oraclelinux7:~# ls -l redis-3.0.6.tar.gz
-rw-r----- 1 root root 1372648 Dec 19  2015 redis-3.0.6.tar.gz
root@oraclelinux7:~# chmod a+x redis-3.0.6.tar.gz
root@oraclelinux7:~# tar xzf redis-3.0.6.tar.gz
root@oraclelinux7:~# cd redis-3.0.6/
root@oraclelinux7:~/redis-3.0.6# make
```

最后画面如下：

```
CC sparkline.o
LINK redis-server
INSTALL redis-sentinel
CC redis-cli.o
LINK redis-cli
CC redis-benchmark.o
LINK redis-benchmark
CC redis-check-dump.o
LINK redis-check-dump
CC redis-check-aof.o
LINK redis-check-aof

Hint: It's a good idea to run 'make test' ;)

make[1]: Leaving directory `/root/redis-3.0.6/src'
root@oraclelinux7:~/redis-3.0.6#
```

服务方式启动：

前台启动 / 后台启动

生产环境常用服务脚本的后台启动方式，如通过指定特定端口，指定pid文件等的服务脚本启动方式。

了解redis启动的配置参数：redis.conf

默认配置文件参数如下：

root@oraclelinux7:~/redis-3.0.6# cat redis.conf | grep -v "^$" | grep -v "^#"

daemonize no

pidfile /var/run/redis.pid

port 6379

tcp-backlog 511

timeout 0

tcp-keepalive 0

loglevel notice

logfile ""

databases 16

save 900 1

save 300 10

save 60 10000

stop-writes-on-bgsave-error yes

rdbcompression yes

rdbchecksum yes

dbfilename dump.rdb

dir ./

slave-serve-stale-data yes

slave-read-only yes

repl-diskless-sync no

repl-diskless-sync-delay 5

repl-disable-tcp-nodelay no

slave-priority 100

appendonly no

appendfilename "appendonly.aof"

appendfsync everysec

no-appendfsync-on-rewrite no

auto-aof-rewrite-percentage 100

auto-aof-rewrite-min-size 64mb

aof-load-truncated yes

lua-time-limit 5000

slowlog-log-slower-than 10000

slowlog-max-len 128

latency-monitor-threshold 0

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

hll-sparse-max-bytes 3000

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

root@oraclelinux7:~/redis-3.0.6#

常用的参数说明：

daemonize (no)： 是否后台方式启动， yes 是后台方式运行，默认是no

pidfile (/var/run/redis.pid): pid文件的位置

port (6379): 默认端口是 6379，可以自己定义（如果一台server运行多个redis时候，需要规划端口和pid配置文件）

bind: 配置监听的网卡，如果多个网卡时候需要配置这个(如外网和内网网卡，redis配置为内网网卡)

root@oraclelinux7:~/redis-3.0.6# cat redis.conf | grep -v "^$" | grep bind

interfaces using the "bind" configuration directive, followed by one or

bind 192.168.1.100 10.0.0.1

bind 127.0.0.1

root@oraclelinux7:~/redis-3.0.6#

logfile "" : log 文件位置，默认是stdout，标准输出，前台启动方式直接把log打印出来，如果后台模式启动的话，输出到/dev/null

loglevel notice : 日志记录级别

    Debug 记录很多信息，用于开发和测试

    Verbose 很多精简的有用信息，不像debug记录那么多

    Notice 通的verbose，常用于生产环境

    Warning 有非常重要或者严重信息记录到日志

配置conf文件到指定目录：

root@oraclelinux7:~/redis-3.0.6# mkdir /etc/redis

root@oraclelinux7:~/redis-3.0.6# cp redis.conf /etc/redis/redis.6380.conf

root@oraclelinux7:~/redis-3.0.6#

修改pid文件的内容：

root@oraclelinux7:/etc/redis# vi redis.6380.conf

root@oraclelinux7:/etc/redis# cat redis.6380.conf | grep "6380"

pidfile /etc/redis/redis.6380.pid

port 6380

root@oraclelinux7:/etc/redis#

root@oraclelinux7:/etc/redis# cat redis.6380.conf | grep -v "^#" | grep daemonize

daemonize yes

root@oraclelinux7:/etc/redis#

启动：

root@oraclelinux7:~/redis-3.0.6/src# pwd

/root/redis-3.0.6/src

root@oraclelinux7:~/redis-3.0.6/src# ./redis-server /etc/redis/redis.6380.conf

root@oraclelinux7:~/redis-3.0.6/src# ps -ef | grep redis

root   3904   1 0 15:44 ?   00:00:00 ./redis-server *:6380

root   4519 1750 0 15:45 pts/0   00:00:00 grep --color=auto redis

root@oraclelinux7:~/redis-3.0.6/src# ./redis-cli -p 6380

127.0.0.1:6380>

127.0.0.1:6380> set a 10

OK

127.0.0.1:6380> get a

"10"

127.0.0.1:6380> exit

root@oraclelinux7:~/redis-3.0.6/src#

root@oraclelinux7:~/redis-3.0.6/src# ./redis-cli -h 127.0.0.1 -p 6380 shutdown

root@oraclelinux7:~/redis-3.0.6/src# ./redis-cli -p 6380

Could not connect to Redis at 127.0.0.1:6380: Connection refused

not connected> exit

root@oraclelinux7:~/redis-3.0.6/src#

服务方式自动启动设置

Linux6环境是配置启动脚本

启动脚本复制到sever启动目录：

root@oraclelinux7:~/redis-3.0.6# cp utils/redis_init_script /etc/init.d/redisd

root@oraclelinux7:~/redis-3.0.6#

定制化启动脚本：

root@oraclelinux7:~/redis-3.0.6# cat /etc/init.d/redisd

```sh
#!/bin/sh
# chkconfig: 2345 90 10
# Simple Redis init.d script conceived to work on Linux systems
# as it does use of the /proc filesystem.

#REDISPORT=6379
REDISPORT=6380
#EXEC=/usr/local/bin/redis-server
EXEC=/root/redis-3.0.6/src/redis-server
#CLIEXEC=/usr/local/bin/redis-cli
CLIEXEC=/root/redis-3.0.6/src/redis-cli

PIDFILE=/var/run/redis_${REDISPORT}.pid
#CONF="/etc/redis/${REDISPORT}.conf"
CONF="/etc/redis/redis_${REDISPORT}.conf"

case "$1" in
    start)
        if [ -f $PIDFILE ]
        then
                echo "$PIDFILE exists, process is already running or crashed"
        else
                echo "Starting Redis server..."
                $EXEC $CONF
        fi
        ;;
    stop)
        if [ ! -f $PIDFILE ]
        then
                echo "$PIDFILE does not exist, process is not running"
        else
                PID=$(cat $PIDFILE)
                echo "Stopping ..."
                $CLIEXEC -p $REDISPORT shutdown
                while [ -x /proc/${PID} ]
                do
                    echo "Waiting for Redis to shutdown ..."
                    sleep 1
                done
                echo "Redis stopped"
        fi
        ;;
    *)
        echo "Please use start or stop as first argument"
        ;;
esac
```

root@oraclelinux7:~/redis-3.0.6#

上面是linux6下编辑/etc/init.d/redisd 的方法

Linux7配置服务文件：

Linux7稍微不一样，通过systemctl start redis
编辑systemctl服务文件：
root@oraclelinux7:/lib/systemd/system# pwd
/lib/systemd/system
root@oraclelinux7:/lib/systemd/system# vi redis.service
root@oraclelinux7:/lib/systemd/system# cat redis.service
[Unit]
Description=Redis
After=network.target

[Service]
Type=forking
ExecStart=/root/redis-3.0.6/src/redis-server /etc/redis/redis.6380.conf
ExecStop=/root/redis-3.0.6/src/redis-cli -h 127.0.0.1 -p 6380 shutdown
ExecReload=/root/redis-3.0.6/src/redis-server -s
PrivateTmp=true

[Install]
WantedBy=multi-user.target
root@oraclelinux7:/lib/systemd/system#

+++

- [Unit] 表示这是基础信息

    - Description 是描述
    - After 是在那个服务后面启动，一般是网络服务启动后启动

- [Service] 表示这里是服务信息

    - ExecStart 是启动服务的命令
    - ExecStop 是停止服务的指令
    - ExecReload 是重启服务的指令

- [Install] 表示这是是安装相关信息

    - WantedBy 是以哪种方式启动：multi-user.target表明当系统以多用户方式（默认的运行级别）启动时，这个服务需要被自动运行。

+++
创建多用户链接：
root@oraclelinux7:/lib/systemd/system# ln -s /lib/systemd/system/redis.service /etc/systemd/system/multi-user.target.wants/redis.service
root@oraclelinux7:/lib/systemd/system#
重新reload下服务：
root@oraclelinux7:/lib/systemd/system# systemctl daemon-reload
启动redis服务：
root@oraclelinux7:/lib/systemd/system# systemctl start redis
root@oraclelinux7:/lib/systemd/system# systemctl status redis
仟 redis.service - Redis
  Loaded: loaded (/usr/lib/systemd/system/redis.service; enabled; vendor preset: disabled)
  Active: active (running) since Wed 2018-03-07 15:55:20 AEDT; 2s ago
 Process: 4853 ExecStart=/root/redis-3.0.6/src/redis-server /etc/redis/redis.6380.conf (code=exited, status=0/SUCCESS)
 Main PID: 4855 (redis-server)
  CGroup: /system.slice/redis.service
      4855 /root/redis-3.0.6/src/redis-server *:6380

Mar 07 15:55:20 oraclelinux7.vagrant.vm systemd[1]: Starting Redis...

Mar 07 15:55:20 oraclelinux7.vagrant.vm systemd[1]: Started Redis.

root@oraclelinux7:/lib/systemd/system# ps -ef | grep redis

root   4855   1 0 15:55 ?   00:00:00 /root/redis-3.0.6/src/redis-server *:6380

root   4862 1750 0 15:55 pts/0   00:00:00 grep --color=auto redis

root@oraclelinux7:/lib/systemd/system#

root@oraclelinux7:/lib/systemd/system# systemctl status redis

仟 redis.service - Redis

  Loaded: loaded (/usr/lib/systemd/system/redis.service; enabled; vendor preset: disabled)

  Active: active (running) since Wed 2018-03-07 15:55:20 AEDT; 2s ago

 Process: 4853 ExecStart=/root/redis-3.0.6/src/redis-server /etc/redis/redis.6380.conf (code=exited, status=0/SUCCESS)

 Main PID: 4855 (redis-server)

  CGroup: /system.slice/redis.service

      4855 /root/redis-3.0.6/src/redis-server *:6380

Mar 07 15:55:20 oraclelinux7.vagrant.vm systemd[1]: Starting Redis...

Mar 07 15:55:20 oraclelinux7.vagrant.vm systemd[1]: Started Redis.

root@oraclelinux7:/lib/systemd/system# ps -ef | grep redis

root   4855   1 0 15:55 ?   00:00:00 /root/redis-3.0.6/src/redis-server *:6380

root   4862 1750 0 15:55 pts/0   00:00:00 grep --color=auto redis

root@oraclelinux7:/lib/systemd/system#

设置环境变量

root@oraclelinux7:~# vi .bashrc

root@oraclelinux7:~# cat .bashrc | grep PATH

  export PATH=$HOME/.linuxbrew/bin:$PATH

  export LD_LIBRARY_PATH=$HOME/.linuxbrew/lib

export PATH=/root/redis-3.0.6/src:$PATH

root@oraclelinux7:~#

root@oraclelinux7:~# source .bashrcroot@oraclelinux7:~# which redis-cli

/root/redis-3.0.6/src/redis-cli

root@oraclelinux7:~# redis-cli -p 6380

127.0.0.1:6380>

127.0.0.1:6380> exit

root@oraclelinux7:~#