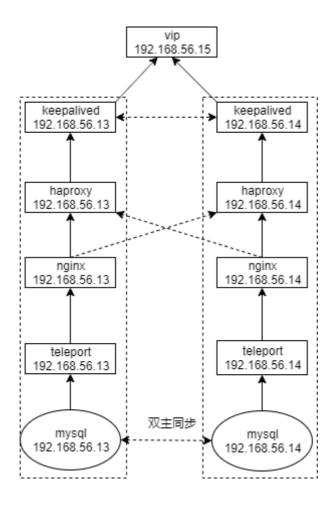
```
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# 环境说明

主机名	IP地址	操作系统	组件	备注
node1	192.168.56.13	centos7	haproxy+keepalived+nginx+teleport+mysql	real_server_1
node2	192.168.56.14	centos7	haproxy+keepalived+nginx+teleport+mysql	real_server_2
-	192.168.56.15	-	-	vip

# 架构图



# 目录结构

```
# tree -L 4 /root/docker-compose/teleport
 2
    /root/docker-compose/teleport
 3
    ├─ data
4
        ├─ haproxy
 5
            6
          keepalived
            ├─ keepalived.conf
8

    □ nginx_check.sh

9
          mysql
10
            └─ etc
11
               └─ my.cnf
12
          - nginx
13
            ├─ etc
               ├─ conf.d
14
               └─ nginx.conf
15
16
            └─ html
17
               ├── 50x.html
                ├─ index.html
18
                └─ static
19
20
          – teleport
21
            ├─ etc
22
                ├─ core.ini
23
               — tp_ssh_server.key
               └─ web.ini
24
25
            ├— log
26
              ├─ tpcore.log
27
                └─ tpweb.log
28
            └─ replay
```

# 配置文件

## docker-compose配置文件

```
1
    # cat /root/docker-compose/teleport/docker-compose.yml
 2
 3
    version: '3.1'
    services:
 5
     mysql:
 6
        image: mysq1:5.7
 7
        container_name: mysql
 8
        tty: true
 9
        volumes:
          - /etc/localtime:/etc/localtime:ro
10
11
          - $PWD/data/mysql/etc/my.cnf:/etc/mysql/my.cnf:ro
          - $PWD/data/mysql/data:/var/lib/mysql
12
13
        restart: always
14
        command: [
          "--character-set-server=utf8mb4",
15
16
          "--collation-server=utf8mb4_unicode_ci",
17
          "--innodb_flush_log_at_trx_commit=1",
          "--sync_binlog=1"
18
19
          ]
20
        environment:
21
          MYSQL_ROOT_PASSWORD: 12wsxCDE#
22
          MYSQL_DATABASE: teleport
23
          MYSQL_USER: teleport
24
          MYSQL_PASSWORD: 12wsxCDE#
25
        ports:
          - 3306:3306
26
27
        restart: always
28
29
      teleport:
30
        build: .
31
        image: teleport:v3.3.1
32
        container_name: teleport
33
        tty: true
34
        depends_on:
35
          - mysql
        command: bash -c "/usr/local/teleport/start.sh && tail -f
36
    /usr/local/teleport/data/log/*.log"
        volumes:
37
38
          - /etc/localtime:/etc/localtime:ro
39
          - $PWD/data/teleport/etc:/usr/local/teleport/data/etc
40
          - $PWD/data/teleport/replay:/usr/local/teleport/data/replay
          - $PWD/data/teleport/log:/usr/local/teleport/data/log
41
```

```
42
        ports:
43
           - 7190:7190
44
           - 127.0.0.1:52080:52080
45
          - 52089:52089
46
           - 52189:52189
47
          - 52389:52389
48
        restart: always
49
50
      nginx:
51
        build: .
52
        image: nginx:latest
53
        container_name: nginx
54
        tty: true
55
        depends_on:
56
          - teleport
57
        volumes:
58
           - /etc/localtime:/etc/localtime:ro
59
           - $PWD/data/nginx/etc/nginx.conf:/etc/nginx/nginx.conf
           - $PWD/data/nginx/etc/conf.d:/etc/nginx/conf.d
60
61
           # - /NWJXZ:/NWJXZ
           # - /opt/nginx/html:/opt/nginx/html
62
63
           - $PWD/data/nginx/html:/opt/nginx/html
64
           - /var/log/nginx:/var/log/nginx
65
        ports:
            - 8000:80
           - 8080:8080
67
68
        restart: always
69
70
      haproxy:
71
         image: haproxy
72
         container_name: haproxy
73
         tty: true
74
         volumes:
75
    $PWD/data/haproxy/haproxy.cfg:/usr/local/etc/haproxy/haproxy.cfg:ro
76
         depends_on:
77
            - nginx
78
         ports:
79
            - "80:80"
80
         restart: always
81
82
      keepalived:
83
         image: osixia/keepalived:2.0.19
84
        container_name: keepalived
85
        tty: true
86
        depends_on:
87
           - nginx
88
        network_mode: "host"
        #pid: "host"
89
90
        #pid: "container:nginx"
        pid: "service:nginx"
91
        cap_drop:
92
93
          - NET_ADMIN
94
        privileged: true
95
        volumes:
96
    $PWD/data/keepalived/keepalived.conf:/usr/local/etc/keepalived/keepalived.c
    onf:ro
```

```
97 -
$PWD/data/keepalived/nginx_check.sh:/container/service/keepalived/assets/ng
inx_check.sh:ro
98 restart: always
```

## keepalived配置文件

### 192.168.56.13

```
# cat /root/docker-compose/teleport/data/keepalived/etc/keepalived.conf
2
 3
   global_defs {
 4
       #这里邮件配置只对内网
 5
       notification_email {
 6
         #xxx@qq.com #邮件报警
 7
       }
       #notification_email_from xxx@163.com #指定发件人
 8
9
       #smtp_server smtp.163.com #指定smtp服务器地址
10
       #smtp_connect_timeout 30
                                #指定smtp连接超时时间
11
       router_id LVS_DEVEL #负载均衡标识,在局域网内应该是唯一的。
12
   }
13
14
   vrrp_script chk_nginx {
       script "/container/service/keepalived/assets/nginx_check.sh"
15
16
       #每2秒检测一次nginx的运行状态
       interval 2
17
       #失败一次,将自己的优先级调整为-20
18
19
       weight -20
20
   }
21
22
   # virtual_ipaddress vip
23
   # vrrp-虚拟路由冗余协议
24
   # vrrp_instance 用来定义对外提供服务的VIP区域及其相关属性
25
   vrrp_instance VI_1 {
26
       state BACKUP #指定该keepalived节点的初始状态
27
       interface enp0s8 #vrrp实例绑定的接口,用于发送VRRP包
       virtual_router_id 51 #取值在0-255之间,用来区分多个instance的VRRP组播, 同一网
28
   段中该值不能重复,并且同一个vrrp实例使用唯一的标识
29
       priority 149 #指定优先级,优先级高的将成为MASTER
       nopreempt #设置为不抢占。默认是抢占的
30
31
       authentication {
32
           auth_type PASS
33
           auth_pass 1111
34
       ###采用单播通信,避免同一个局域网中多个keepalived组之间的相互影响
35
36
       unicast_src_ip 192.168.56.13 ##本机ip
37
       unicast_peer { #采用单播的方式发送VRRP通告,指定单播邻居的IP地址
38
           192.168.56.14
39
40
       virtual_ipaddress { #指定VIP地址
41
           192.168.56.15
42
       }
43
       #nginx存活状态检测脚本
44
       track_script {
45
           nginx_check
46
       }
```

```
notify "/container/service/keepalived/assets/notify.sh"

| 8 | 3 |
```

### 192.168.56.14

```
# cat docker-compose/teleport/data/keepalived/etc/keepalived.conf
 2
 3
   global_defs {
4
       #这里邮件配置只对内网
 5
       notification_email {
         #xxx@qq.com #邮件报警
 7
       }
8
       #notification_email_from xxx@163.com #指定发件人
9
       #smtp_server smtp.163.com #指定smtp服务器地址
10
       #smtp_connect_timeout 30
                                #指定smtp连接超时时间
       router_id LVS_DEVEL #负载均衡标识,在局域网内应该是唯一的。
11
12
   }
13
14
   vrrp_script chk_nginx {
15
       script "/container/service/keepalived/assets/nginx_check.sh"
16
       #每2秒检测一次nginx的运行状态
17
       interval 2
       #失败一次,将自己的优先级调整为-20
18
19
       weight -20
20
   }
21
   # virtual_ipaddress vip
22
23
   # vrrp-虚拟路由冗余协议
24
   # vrrp_instance 用来定义对外提供服务的VIP区域及其相关属性
25
   vrrp_instance VI_1 {
26
       state BACKUP #指定该keepalived节点的初始状态
27
       interface enp0s8 #vrrp实例绑定的接口,用于发送VRRP包
28
       virtual_router_id 51 #取值在0-255之间,用来区分多个instance的VRRP组播, 同一网
   段中该值不能重复,并且同一个vrrp实例使用唯一的标识
29
       priority 149 #指定优先级,优先级高的将成为MASTER
30
       nopreempt #设置为不抢占。默认是抢占的
31
       authentication {
32
           auth_type PASS
33
           auth_pass 1111
34
       ###采用单播通信,避免同一个局域网中多个keepalived组之间的相互影响
35
36
       unicast_src_ip 192.168.56.14 ##本机ip
       unicast_peer { #采用单播的方式发送VRRP通告,指定单播邻居的IP地址
37
           192.168.56.13
38
39
40
       virtual_ipaddress { #指定VIP地址
41
           192.168.56.15
42
43
       #nginx存活状态检测脚本
44
       track_script {
45
           nginx_check
46
47
       notify "/container/service/keepalived/assets/notify.sh"
48
   }
```

```
# cat /root/docker-compose/teleport/data/keepalived/etc/nginx_check.sh
 2
 3
    #!/bin/bash
 4
    #counter=$(ps -C nginx --no-heading|wc -1)
 5
    counter=$(ps -ef|grep nginx|grep -v grep|wc -1)
    if [ "${counter}" = "0" ]; then
 6
 7
        sleep 3
 8
        #counter=$(ps -C nginx --no-heading|wc -1)
 9
        counter=$(ps -ef|grep nginx|grep -v grep|wc -1)
        if [ "${counter}" = "0" ]; then
10
            #systemctl stop keepalived
11
12
            #pkill keepalived
13
            ps -ef|grep keepalived|grep -v grep|awk '{print $1}'|xargs kill -9
        fi
14
   fi
15
```

## haproxy配置文件

```
# cat /root/docker-compose/teleport/data/haproxy/haproxy.cfg
 2
    global
 3
            log 127.0.0.1 local0
 4
 5
            log 127.0.0.1 local1 notice
 6
    defaults
 7
            log global
            mode http
 8
 9
            option httplog
10
            option dontlognull
11
            timeout connect 5000ms
12
            timeout client 50000ms
            timeout server 50000ms
13
14
            stats uri /status
15
16
    frontend http-in
17
        bind
                         *:80
18
        acl url_static path_beg -i / /static /mirrors /gitbook /pypi
19
        acl url_static path_end -i .jpg .jpeg .gif .png .ico .bmp .html
20
21
        use_backend
                         static_group
                                         if url_static
        default_backend dynamic_group
22
23
24
    backend static_group
25
            balance roundrobin
26
        option httpchk GET /
27
            http-check expect status 200
28
            server ngx_server_1 192.168.56.13:8000 check
29
            server ngx_server_2 192.168.56.14:8000 check
30
31
    backend dynamic_group
32
            balance roundrobin
33
            cookie tp_server insert indirect nocache
34
            server tp_server_1 192.168.56.13:8080 check cookie tp_server_1
35
            server tp_server_2 192.168.56.14:8080 check cookie tp_server_2
```

## nginx.conf

```
# cat /root/docker-compose/teleport/data/nginx/etc/nginx.conf
 2
 3
    user nginx;
 4
    worker_processes 1;
 5
 6
    error_log /var/log/nginx/error.log warn;
 7
               /var/run/nginx.pid;
 8
 9
    events {
10
11
        worker_connections 1024;
12
13
14
15
    http {
                      /etc/nginx/mime.types;
16
        include
17
        default_type application/octet-stream;
18
19
        log_format main '$remote_addr - $remote_user [$time_local] "$request"
20
                           '$status $body_bytes_sent "$http_referer" '
                           '"$http_user_agent" "$http_x_forwarded_for"';
21
22
23
        access_log /var/log/nginx/access.log main;
24
25
        sendfile
                        on:
26
        #tcp_nopush
                        on;
27
28
        keepalive_timeout 65;
29
30
        #gzip on;
31
32
        include /etc/nginx/conf.d/*.conf;
33 }
```

### conf.d/\*.conf

### conf.d/default.conf

```
1
    # cat /root/docker-compose/teleport/data/nginx/etc/conf.d/default.conf
 2
 3
    server {
 4
                     80;
 5
        server_name localhost;
 6
 7
        #charset koi8-r;
        access_log /var/log/nginx/access.log main;
 8
 9
        error_log /var/log/nginx/error.log;
10
11
        location / {
12
            root /opt/nginx/html;
```

```
13
             index index.html index.htm;
14
        }
15
16
        location /nginx_status {
17
             stub_status on;
18
             access_log off;
19
             allow 10.75.12.143;
20
             allow 10.75.12.145;
21
             deny all;
22
        }
23
24
         location /mirrors {
25
             root /opt/nginx/html/;
26
             autoindex on;
27
             autoindex_format html;
             autoindex_exact_size off;
28
29
             autoindex_localtime on;
30
             charset utf-8,gbk;
        }
31
32
33
        location /gitbook {
34
            root /opt/nginx/html/;
35
            autoindex on;
36
            autoindex_format html;
37
            autoindex_exact_size off;
38
            autoindex_localtime on;
39
            charset utf-8,gbk;
40
        }
41
        location /pypi/web {
43
            root /opt/nginx/html/;
44
            autoindex on;
            autoindex_format html;
45
46
            autoindex_exact_size off;
            autoindex_localtime on;
48
            charset utf-8,gbk;
49
        }
50
51
        location /mirrors/backup/ {
52
           root /opt/nginx/html/;
53
           autoindex on:
54
           autoindex_format html;
55
           autoindex_exact_size off;
56
           autoindex_localtime on;
57
           allow 10.75.12.143;
           allow 10.75.12.145;
58
59
           deny all;
60
        }
61
                      500 502 503 504 /50x.html;
62
        error_page
63
         location = /50x.html {
64
                    /usr/share/nginx/html;
             root
         }
65
66
67
    }
```

```
# cat /root/docker-compose/teleport/data/nginx/etc/conf.d/proxy.conf
 2
 3
    upstream teleport {
 4
        server teleport:7190;
 5
    }
 6
 7
    server {
 8
        listen 8080;
 9
        server_name www.mxnet.io;
10
11
        access_log /var/log/nginx/access.log main;
12
        error_log /var/log/nginx/error.log;
13
14
        location /nginx_status {
15
            stub_status on;
16
            access_log off;
17
            allow 10.75.12.143;
            deny all;
18
19
        }
20
        location / {
21
22
            proxy_pass http://teleport;
23
24
            #Proxy Settings
25
            proxy_redirect
                                off;
26
            proxy_set_header
                               Host
                                                 $host:
            proxy_set_header X-Real-IP
                                                 $remote_addr;
28
            proxy_set_header X-Forwarded-For $proxy_add_x_forwarded_for;
29
            proxy_next_upstream error timeout invalid_header http_500 http_502
    http_503 http_504;
30
            proxy_max_temp_file_size 0;
31
            proxy_connect_timeout
                                        90;
32
            proxy_send_timeout
                                        90;
33
            proxy_read_timeout
                                        90;
34
            proxy_buffer_size
                                        4k;
35
            proxy_buffers
                                        4 32k;
            proxy_busy_buffers_size
36
                                        64k;
37
            proxy_temp_file_write_size 64k;
38
            #以下三行是websocket需要的
39
40
            proxy_http_version 1.1;
41
            proxy_set_header Upgrade $http_upgrade;
42
            proxy_set_header Connection "upgrade";
43
44
45
    }
```

## teleport配置文件

### web.ini

```
# cat /root/docker-compose/teleport/data/teleport/etc/web.ini

codec: utf-8
```

```
5
    [common]
7
    ; ip=0.0.0.0
9
   ; port listen by web server, default to 7190.
10
   ; DO NOT FORGET update `common::web-server-rpc` in core.ini if you modified
    this setting.
   port=7190
11
12
13
    ; log file of web server, default to /var/log/teleport/tpweb.log
   log-file=/usr/local/teleport/data/log/tpweb.log
14
15
   ; \log-\text{level} can be 0 ~ 4, default to 2.
16
17 ; LOG_LEVEL_DEBUG 0 log every-thing.
   ; LOG_LEVEL_VERBOSE 1 log every-thing but without debug message.
18
19
   ; LOG_LEVEL_INFO 2 log information/warning/error message.
   ; LOG_LEVEL_WARN
20
                       3 log warning and error message.
; LOG_LEVEL_ERROR 4 log error message only.
22
   log-level=0
23
   ; 0/1. default to 0.
24
   ; in debug mode, `log-level` force to 0 and display more message for debug
    purpose.
   debug-mode=0
26
27
   ; `core-server-rpc` is the rpc interface of core server.
28
29
    ; default to `http://127.0.0.1:52080/rpc`.
   ; DO NOT FORGET update this setting if you modified rpc::bind-port in
    core.ini.
31
   core-server-rpc=http://127.0.0.1:52080/rpc
32
33
   [database]
34
35
   ; database in use, should be sqlite/mysql, default to sqlite.
36
   type=mysql
37
38
    ; sqlite-file=/usr/local/teleport/data/db/teleport.db
39
40
   mysql-host=mysql
41
42
    mysql-port=3306
43
44
   mysql-db=teleport
45
46
   mysql-prefix=tp_
47
48
   mysql-user=teleport
49
50 mysql-password=12wsxCDE#
```

### core.ini

```
# cat /root/docker-compose/teleport/data/teleport/etc/core.ini

codec: utf-8

[common]
```

```
6 ; 'log-file' define the log file location. if not set, default locate
    ; to $INSTDIR%/data/log/tpcore.log
    ;log-file=/var/log/teleport/tpcore.log
9
10
    ; log-level can be 0 \sim 4, default value is 2.
11 ; LOG_LEVEL_DEBUG 0 log every-thing.
   ; LOG_LEVEL_VERBOSE 1 log every-thing but without debug message.
12
13
   ; LOG_LEVEL_INFO 2 log infomation/warning/error message.
                        3 log warning and error message.
14 ; LOG_LEVEL_WARN
    ; LOG_LEVEL_ERROR 4 log error message only.
15
16 log-level=2
17
18
    ; 0/1. default to 0.
    ; in debug mode, `log-level` force to 0 and display more message for debug
19
    purpose.
    debug-mode=0
20
21
22
    ; 'replay-path' define the replay file location. if not set, default locate
23
   ; to `$INSTDIR%/data/replay`
24
    ;replay-path=/var/lib/teleport/replay
25
    ; `web-server-rpc` is the rpc interface of web server.
26
    ; default to `http://127.0.0.1:7190/rpc`.
27
28
    ; DO NOT FORGET update this setting if you modified common::port in
    web.ini.
29
    web-server-rpc=http://127.0.0.1:7190/rpc
30
31
    [rpc]
   ; Request by web server. `bind-ip` should be the ip of core server. If web
32
    server and
33
    ; core server running at the same machine, it should be `127.0.0.1`.
    ; DO NOT FORGET update `common::core-server-rpc` in web.ini if you modified
    this setting.
35 | bind-ip=127.0.0.1
36
   bind-port=52080
37
38
   [protocol-ssh]
39
   enabled=true
40 lib=tpssh
41
    bind-ip=0.0.0.0
    bind-port=52189
42
43
44
    [protocol-rdp]
45
   enabled=true
46
    lib=tprdp
47
    bind-ip=0.0.0.0
48
    bind-port=52089
49
50
   [protocol-telnet]
51
   enabled=true
52
   lib=tptelnet
   bind-ip=0.0.0.0
53
54 | bind-port=52389
```

## mysql配置文件

#### 192,168,56,13

```
# cat /root/docker-compose/teleport/data/mysgl/etc/my.cnf
 2
 3
    [mysql]
4
 5
   [mysqld]
   pid-file = /var/run/mysqld/mysqld.pid
6
7
   socket
             = /var/run/mysqld/mysqld.sock
   datadir = /var/lib/mysql
8
9
   #log-error = /var/log/mysql/error.log
10
   # By default we only accept connections from localhost
   #bind-address = 127.0.0.1
11
   # Disabling symbolic-links is recommended to prevent assorted security
12
    risks
13
    symbolic-links=0
14
15
   lower_case_table_names = 1 #不区分大小写
   character_set_server = utf8 #字符编码
16
17
   log-bin=mysql-bin # 开启bin-log 日志, MySQL主从配置, 必须开启
18
19
   log-bin-index=mysql-bin
20
21
   #master
22
    server_id=1 # 唯一的标识,与slave不同
23
24
   log-slave-updates = true # 双主互备必须开启,否则只是主从关系
25
   relay-log= relaylog
26
   relay-log-index=relaylog
27
    relay-log-purge=on
28
29
   binlog-do-db=teleport #开启同步的数据库
30
31 #auto-increment-increment = 2
   #auto-increment-offset = 1
```

### 192.168.56.14

```
# cat /root/docker-compose/teleport/data/mysql/etc/my.cnf
 1
 2
 3
    [mysql]
 4
 5
    [mysqld]
 6
    pid-file = /var/run/mysqld/mysqld.pid
            = /var/run/mysqld/mysqld.sock
= /var/lib/mysql
 7
    socket
 8
    datadir
9
    #log-error = /var/log/mysql/error.log
   # By default we only accept connections from localhost
10
    \#bind-address = 127.0.0.1
11
    # Disabling symbolic-links is recommended to prevent assorted security
12
    risks
13
    symbolic-links=0
14
15
    lower_case_table_names = 1 #不区分大小写
16
    character_set_server = utf8 #字符编码
17
```

```
log-bin=mysql-bin # 开启bin-log 日志, MySQL主从配置, 必须开启
19
   log-bin-index=mysql-bin
20
21
   #slave
22
   #server_id=2 # 唯一的标识,与master不同
23
24
   log-slave-updates = true # 双主互备必须开启,否则只是主从关系
25
   relay-log= relaylog
26 relay-log-index=relaylog
27
   relay-log-purge=on
28
29
   binlog-do-db=teleport #开启同步的数据库
30
31 | #auto-increment-increment = 2
32 #auto-increment-offset = 2
```

# 配置mysql 双主同步

MySQL主主复制结构区别于主从复制结构。在主主复制结构中,两台服务器的任何一台上面的数据库存发生了改变都会同步到另一台服务器上,这样两台服务器互为主从,并且都能向外提供服务。

### 不登录mysql

```
#查看master状态
docker exec -it mysql bash -c "mysql -uroot -p12wsxCDE# -se 'show master status\G;'"

#查看slave状态
docker exec -it mysql bash -c "mysql -uroot -p12wsxCDE# -se 'show slave status\G;'"

#查看grep过滤后的信息
docker exec -it mysql bash -c "mysql -uroot -p12wsxCDE# -se 'show slave status\G;'"|grep -E -i 'running|host|state' |sed -rn '/^[\t]*$/!s#^[\t]*##gp'

#查看uuid
docker exec -it mysql bash -c "mysql -uroot -p12wsxCDE# -se 'show slave hosts\G;'"
```

#### 登录mysql

```
+-----
   ----+
   1 row in set (0.01 sec)
9
   mysql>
10
11
  # slave上停止已有同步
12
   mysql> stop slave;
13
   Query OK, 0 rows affected (0.00 sec)
14
   mysq1>
15
16
   # slave上配置同步
17
   mysql> change master to
   master_host='192.168.56.13',master_user='root',master_password='12wsxCDE#',
   master_port=3306, master_log_file='mysql-bin.000121',master_log_pos=154;
18
   Query OK, 0 rows affected, 2 warnings (0.16 sec)
19
   mysq1>
20
21
  # slave上开启同步
22
  mysql> start slave;
23
   Query OK, 0 rows affected (0.00 sec)
24
   mysq1>
25
26
  # slave上查看slave同步状态
27
  mysql> show slave status\G;
28
29
   Master_Host: 192.168.56.13
30
  Slave_IO_Running: Yes
31 | Slave_SQL_Running: Yes
32
33
   mysql>
34
35
   # slave上查看master状态
36
   mysql> show master status;
37
   +-----
38
   | File
                 | Position | Binlog_Do_DB | Binlog_Ignore_DB |
   Executed_Gtid_Set |
   +-----
39
   ----+
40
   | mysql-bin.000114 | 1237 | teleport
         +-----
41
   ----+
42
   1 row in set (0.00 sec)
43
   mysql>
44
45
   # master上停止已有同步
46
   mysql> stop slave;
   Query OK, 0 rows affected (0.00 sec)
47
48
   mysql>
49
50
   # master上配置同步
51
   mysql> change master to
   master_host='192.168.56.14', master_user='root', master_password='12wsxCDE#',
   master_port=3306, master_log_file='mysql-bin.000114', master_log_pos=1237;
52
   Query OK, 0 rows affected, 2 warnings (0.01 sec)
53
   mysq1>
54
```

```
55 # master上开启同步
56 mysql> start slave;
   Query OK, 0 rows affected (0.00 sec)
57
58 mysql>
59
60
   # master上查看slave同步状态
61
   mysql> show slave status\G;
62
63 Master_Host: 192.168.56.14
64 | Slave_IO_Running: Yes
65 | Slave_SQL_Running: Yes
66
   . . .
67 mysql>
```

## mysql报错解决

```
报错1:
   mysql主从复制报错:The slave I/O thread stops because master and slave have
    equal MySQL server UUIDs
   错误信息: Last_IO_Error: Fatal error: The slave I/O thread stops because
    master and slave have equal MySQL server UUIDs; these UUIDs must be
    different for replication to work
 6
   原因: /var/lib/mysql/auto.cnf发现里面的UUID是相同的,为什么呢? 因为在配置主从时,整个
    环境都是克隆的过来的。
 7
   解决方法:备份从库的UUID(mv /var/lib/mysql/auto.cnf
    /var/lib/mysql/auto.cnf.bak)然后重启mysql就可以了,auto.cnf会自动生成一个新的。
 9
10
11
   报错2:
12
   mysql主从复制报错:A slave with the same server_uuid as this slave has
    connected to the master
13
   错误信息: Last_IO_Error: Got fatal error 1236 from master when reading data
    from binary log: 'A slave with the same server_uuid as this slave has
    connected to the master; the first event 'mysql-bin.000009' at 2379, the
    last event read from './mysql-bin.000009' at 3353, the last byte read from
    './mysql-bin.000009' at 3353.'
15
   原因: Slave的server_uuid 有冲突,导致一主多从的主从复制有问题
16
17
18
   解决方法: 在对/var/lib/mysql/auto.cnf进行备份后(mv /var/lib/mysql/auto.cnf
    /var/lib/mysql/auto.cnf.bak),尝试对其进行删除,然后重新启动mysql
19
20
   # cat /var/lib/mysql/auto.cnf
21
    server-uuid=d186c795-4a2a-11e9-a756-0242ac140002
```

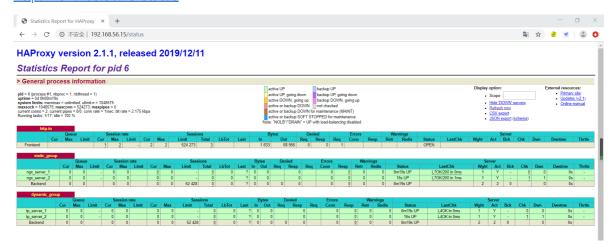
# 启动teleport

```
1 # cd /root/docker-compose/
2 # docker-compose up -d
```

```
Creating network "teleport_default" with the default driver
    Creating mysql ... done
    Creating teleport ... done
   Creating nginx ... done
 7
    Creating keepalived ... done
    Creating haproxy ... done
 8
 9
10
    # docker-compose ps --service
11
12
   teleport
13
   nginx
14 haproxy
15 keepalived
```

# 查看haproxy状态

#### http://192.168.56.15/status



# 访问teleport

#### http://192.168.56.15

