

Keepalived



如果有一台 web 服务器死机，或工作出现故障，Keepalived 将检测到，并将有故障的 web 服务器从系统中剔除，当 web 服务器工作正常后 Keepalived 自动将 web 服务器加入到服务器群中，这些工作全部自动完成，不需要人工干涉，Keepalived 使用 vrrp 协议通过广播来监控状态。

- CentOS release 5.6 (Final) GNU/Linux 2.6.18-238.el5 x86_64

Keepalived	keepalived-1.1.20.tar.gz	http://www.keepalived.org/download.html
Nginx	nginx-1.1.0.tar.gz	http://nginx.org/en/download.html

一. 安装软件

```
# 链接内核源码至 /usr/src/linux
ln -s /usr/src/kernels/2.6.18-238.el5-x86_64 /usr/src/linux

# 安装 Keepalived
tar zxvf keepalived-1.1.20.tar.gz
cd keepalived-1.1.20
./configure --prefix=/usr/local/keepalived
make
make install

# 安装 Nginx
tar zxvf nginx-1.1.0.tar.gz
cd nginx-1.1.0
./configure --prefix=/usr/local/nginx --with-pcre --with-http_stub_status_module --with-poll_module
make
make install
```

二. 配置软件

```
# MASTER

global_defs {
    router_id LVS_DEVEL
}

vrrp_script chk_http_port {
    script "/opt/nginx_pid.sh"          -- 使用此脚本监控 Nginx 状态
    interval 2                          -- 轮换执行时间
    weight 2
}
```

```

vrp_instance VI_1 {
    state MASTER
    interface eth0
    virtual_router_id 51
    priority 120
    advert_int 2
    authentication {
        auth_type PASS
        auth_pass 1111
    }
    track_script {
        chk_http_port          -- 执行监控服务名称
    }
    virtual_ipaddress {
        192.168.137.100
    }
}

```

```

# BACKUP

global_defs {
    router_id LVS_DEVEL
}

vrp_script chk_http_port {
    script "/opt/nginx_pid.sh"    -- 使用此脚本监控 Nginx 状态
    interval 2                  -- 轮换执行时间
    weight 2
}

vrp_instance VI_1 {
    state BACKUP
    interface eth0
    virtual_router_id 51
    priority 100
    advert_int 2
    authentication {
        auth_type PASS
        auth_pass 1111
    }
    track_script {
        chk_http_port          -- 执行监控服务名称
    }
    virtual_ipaddress {
        192.168.137.100
    }
}

```

三. Nginx 配置

```

# 编辑 Nginx 配置文件 vim /usr/local/nginx/conf/nginx.conf

worker_processes 1;

events {
    use epoll;
    worker_connections 1024;
}

http {
    include mime.types;
    default_type application/octet-stream;

```

```

access_log      off;
sendfile        on;
keepalive_timeout 65;
server {
    listen        80;
    server_name    localhost;
    location / {
        root      html;
        index      index.html index.htm;
    }
    error_page 500 502 503 504 /50x.html;
    location = /50x.html {
        root      html;
    }
}
}

```

四. 启动关闭

```

# 启动 Keepalived , 此处不能使用相对路径
cd /usr/local/keepalived/sbin/
./keepalived -d -f /usr/local/keepalived/etc/keepalived/keepalived.conf

# 关闭 Keepalived
killall keepalived

```

```

ip a                                -- 查看 Master 网卡状态

1: lo: <LOOPBACK,UP,LOWER_UP> mtu 16436 qdisc noqueue
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast qlen 1000
    link/ether 00:0c:29:73:8c:f0 brd ff:ff:ff:ff:ff:ff
    inet 192.168.137.130/24 brd 192.168.137.255 scope global eth0
    inet 192.168.137.100/32 scope global eth0

```

```

# 脚本 vim /opt/nginx_pid.sh

#!/bin/bash
if [ `ps -C nginx --no-header|wc -l` -eq 0 ];then
    /usr/local/nginx/sbin/nginx
    sleep 3
    if [ `ps -C nginx --no-header |wc -l` -eq 0 ];then
        killall keepalived
    fi
fi

```