**搭建负载均衡的LAMP平台——LVS+LAMP**

服务器和数据库服务器的规划拓扑图：



下载php镜像：https://downloads.php.net/~stas/或者https://secure.php.net/releases/

下载mariadb(mysql数据库)镜像：https://downloads.mariadb.org/MariaDB/+files/

下载httpd镜像：https://httpd.apache.org/download.cgi

下载WordPress镜像：https://wordpress.org/download/release-archive/

安装http软件：

1、首先安装apr和apr-util软件

cd /usr/src/LAMP

tar zxvf apr-1.5.2.tar.gz

cd apr-1.5.2

./configure --prefix=/usr/local/apr

make && make insttall

cd /usr/local/LAMP

tar zxvf apr-util-1.5.4.tar.gz

cd apr-util-1.5.4

./configure --prefix=/usrlocal/apr-util --with-apr=/usr/local/apr

make && make install

2、安装httpd所需要的软件和库文件：

yum install pcre-devel mod\_ssl openssl-devel

3、安装httpd软件：

tar zxvf httpd-2.4.23.tar.gz

cd httpd-2.4.23

./configure --prefix=/usr/local/apache --sysconfdir=/etc/httpd/ --enable-so --enable-rewirte --enable-ssl --enable-cgi --enable-cgid --enable-modules=most --enable-mods-shared=most --enable-mpms-shared=all --with-apr=/usr/local/apr --with-apr-util=/usr/local/apr-util/

make && make install

4、修改配置文件：

cd /etc/httpd/

echo "ServerName localhost:80" >> /httpd.conf

sed -i 's@index.html@index.html index.php@g' httpd.conf

在httpd.conf中添加如下内容：

AddType application/x-httpd-php .php

Include conf/vhost/vhost.conf

make /etc/httpd/conf/vhost

cat /etc/httpd/conf/vhost/vhost.conf #建立一个基于域名的虚拟主机：

<VirtualHost 192.168.138.100:80>

ServerName www.boke.com

DocumentRoot /mydata/boke

<Directory "/mydata/boke">

Options Indexes FollowSymLinks

Allowverride None

Require all granted

</Directory>

</VirtualHost>

5、检测httpd的配置文件的语法并且重启apachectel服务

apachectl -t

apachectl start

安装mysql数据库软件

1、利用源码安装mysql：

tar zxvf mysql-5.7.15-linux-glibc2.5-x86\_64.tar.gz -C /usr/local

cd /usr/local

ln -sv mysql-5.7.15-linux-glibc2.5-x86\_64 mysql

groupadd mysql

useradd -r -g mysql -s /sbin/nologin mysql

chown -R mysql:mysql ./mysql/\*

mkdir /mydata/data -pv

chown -R mysql:mysql /mydata/data

./bin/mysqld --initialize --user=mysql --datadir=/mydata/data

sed -i 's@datadir=@datadir=/mydata/data@g' ./support/mysql.server

./support/mysql.server start

echo "export PATH=$PATH:/usr/local/mysql/bin" > /etc/profile.d/mysql.sh

echo "/usr/local/mysql/lib" > /etc/ld.so.conf.d/mysqld.conf

. /etc/profile.d/mysql.sh

mysql -uroot -p

mysql>set passowrd=password('密码');

mysql>flush privileges;

mysql>\q

安装php软件：

1、安装PHP所需的软件和库文件：

yum install libxml2-devel bzip2-devel

2、解压并安装PHP软件：

tar jxvf php-5.4.40.tar.bz2

cd php-5.4.40

./configure --prefix=/usr/local/php --with-mysql=mysqlnd --with-openssl --with-mysqli=mysqlnd --enable-mbstring --with-freetype-dir --with-jpeg-dir --with-png-dir --with-zlib --with-libxml-dir=/usr/ --enable-xml --enable-sockets --with-apxs2=/usr/local/apache/bin/apxs --with-mcrypt --with-config-file-path=/etc/php.ini --with-config-file-scan-dir=/etc/php.d/ --with-bz2 --enable-maintainer-zts

make && make install

安装ipvsadm软件：

1、首先查看内核是否加载了ipvs模块(注：内核版本在2.4以后内核都默认加载了ipvs模块)

modprobe -l | grep ipvs

2、解压安装ipvsadm软件：

cd /usr/src/

tar zxvf ipvsadm.tar.gz

cd ipvsadm-1.24

ln -sv /usr/src/kernels/2.6.32-504.el6.x86\_64 /usr/src/linux #添加内核的链接

make && make install

LVS负载均衡技术：

1、在调度器上设置RS：

service iptables stop

ipvsadm -A -t 192.168.138.100:80 -s rr -p 3600

ipvsadm -a -t 192.168.138.100:80 -r 192.168.139.129 -g -w 1

ipvsadm -a -t 192.168.138.100:80 -r 192.168.139.130 -g -w 2

2、在RS上添加VIP地址：

echo 2 > /proc/sys/net/ipv4/conf/eth0/arp\_announce

echo 2 > /proc/sys/net/ipv4/conf/all/arp\_announce

echo 1 > /proc/sys/net/ipv4/conf/all/arp\_ignore

echo 1 > /proc/sys/net/ipv4/conf/eth0/arp\_ignore

ifconfig lo:0 192.168.138.100 broadcast 192.168.138.100 netmask 255.255.255.255 up

route add -host 192.168.138.100 dev lo:0