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1.准备工作(centos7)

(1) 配置系统自动联网(本操作需要重启生效)

进入/etc/sysconfig/network-scripts/文件夹找到网卡对应的文件如网卡是 enp2s0 文件则是 ifcfg-enp2s0

```
[root@localhost /]# cd /etc/sysconfig/network-scripts/
[root@localhost network-scripts]# ifconfig
enp2s0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 10.6.1.6 netmask 255.255.255.0 broadcast 10.6.1.255
    inet6 fe80::51e6:4c09:b60e:4816 prefixlen 64 scopeid 0x20<link>
    ether 98:ee:cb:6e:0e:7a txqueuelen 1000 (Ethernet)
    RX packets 1239 bytes 828801 (809.3 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 769 bytes 91640 (89.4 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1 (Local Loopback)
    RX packets 72 bytes 6544 (6.3 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 72 bytes 6544 (6.3 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

virbr0: flags=4099<UP,BROADCAST,MULTICAST> mtu 1500
    inet 192.168.122.1 netmask 255.255.255.0 broadcast 192.168.122.255
    ether 52:54:00:b5:a3:e4 txqueuelen 1000 (Ethernet)
    RX packets 0 bytes 0 (0.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 0 bytes 0 (0.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

[root@localhost network-scripts]# ls -l|grep enp2s0
-rw-r--r--. 1 root root 281 Jan 4 15:02 ifcfg-enp2s0
[root@localhost network-scripts]# vi ifcfg-enp2s0
```

修改为 ONBOOT=yes

```
TYPE=Ethernet
PROXY_METHOD=none
BROWSER_ONLY=no
BOOTPROTO=dhcp
DEFROUTE=yes
IPV4_FAILURE_FATAL=no
IPV6INIT=yes
IPV6_AUTOCONF=yes
IPV6_DEFROUTE=yes
IPV6_FAILURE_FATAL=no
IPV6_ADDR_GEN_MODE=stable-privacy
NAME=enp2s0
UUID=efddea1c-4428-4f15-b1cc-c167794700bd
DEVICE=enp2s0
ONBOOT=yes
```

(2) 关闭 selinux

通过命令 `getenforce` 来查看一下 SELinux 的状态，`enforcing` 为强制启用

```
[root@localhost ~]# getenforce
Enforcing
[root@localhost ~]#
```

SELinux 一共有 3 种状态，分别是 Enforcing，Permissive 和 Disabled 状态。第一种是默认状态，表示强制启用，第二种是宽容的意思，即大部分规则都放行。第三种是禁用，即不设置任何规则。只能通过 `setenforce` 命令来设置前面两种状态，而如果想修改为 `disable` 状态，需要修改配置文件，同时重启系统。

打开配置文件 `/etc/selinux/config`

修改为 `SELINUX=disabled`

```
# This file controls the state of SELinux on the system.
# SELINUX= can take one of these three values:
#     enforcing - SELinux security policy is enforced.
#     permissive - SELinux prints warnings instead of enforcing.
#     disabled - No SELinux policy is loaded.
SELINUX=disabled
# SELINUXTYPE= can take one of three two values:
#     targeted - Targeted processes are protected,
#     minimum - Modification of targeted policy. Only selected processes are protected.
#     mls - Multi Level Security protection.
SELINUXTYPE=targeted
```

保存并退出重启即可

(3) 关闭防火墙

CentOS 7.0 默认使用的是 `firewall` 作为防火墙

关闭 `firewall`

`#systemctl stop firewalld.service`

```
[root@localhost ~]# systemctl stop firewalld.service
[root@localhost ~]# systemctl status firewalld.service
● firewalld.service - firewalld - dynamic firewall daemon
   Loaded: loaded (/usr/lib/systemd/system/firewalld.service; enabled; vendor preset: enabled)
   Active: inactive (dead) since Sun 2019-01-06 07:28:52 +07; 1min 59s ago
     Docs: man:firewalld(1)
   Process: 1186 ExecStart=/usr/sbin/firewalld --nofork --nopid $FIREWALLD_ARGS (code=exited, status=0/SUCCESS)
   Main PID: 1186 (code=exited, status=0/SUCCESS)

Jan 06 07:14:52 localhost.localdomain systemd[1]: Starting firewalld - dynamic firewall daemon...
Jan 06 07:14:54 localhost.localdomain systemd[1]: Started firewalld - dynamic firewall daemon.
Jan 06 07:14:55 localhost.localdomain firewalld[1186]: WARNING: ICMP type 'beyond-scope' is not supported by the kernel for ipv6.
Jan 06 07:14:55 localhost.localdomain firewalld[1186]: WARNING: beyond-scope: INVALID ICMPTYPE: No supported ICMP type., ignoring for run-time.
Jan 06 07:14:55 localhost.localdomain firewalld[1186]: WARNING: ICMP type 'failed-policy' is not supported by the kernel for ipv6.
Jan 06 07:14:55 localhost.localdomain firewalld[1186]: WARNING: failed-policy: INVALID ICMPTYPE: No supported ICMP type., ignoring for run-time.
Jan 06 07:14:55 localhost.localdomain firewalld[1186]: WARNING: ICMP type 'reject-route' is not supported by the kernel for ipv6.
Jan 06 07:14:55 localhost.localdomain firewalld[1186]: WARNING: reject-route: INVALID ICMPTYPE: No supported ICMP type., ignoring for run-time.
Jan 06 07:28:51 localhost.localdomain systemd[1]: Stopping firewalld - dynamic firewall daemon...
Jan 06 07:28:52 localhost.localdomain systemd[1]: Stopped firewalld - dynamic firewall daemon.
[root@localhost ~]#
```

禁止 `firewall` 开机启动

`#systemctl disable firewalld.service`

```
[root@localhost ~]# systemctl disable firewalld.service
Removed symlink /etc/systemd/system/multi-user.target.wants/firewalld.service.
Removed symlink /etc/systemd/system/dbus-org.fedoraproject.FirewallD1.service.
```

重启即可

(4) 更换软件源（以 aliyun mirror 为例）

首先备份/etc/yum.repos.d/CentOS-Base.repo

```
[root@localhost ~]# mv /etc/yum.repos.d/CentOS-Base.repo /etc/yum.repos.d/CentOS-Base.repo.bk
[root@localhost ~]#
```

进入源文件所在位置并下载 aliyun mirror

#wget http://mirrors.aliyun.com/repo/Centos-7.repo

```
[root@localhost yum.repos.d]# cd /etc/yum.repos.d/
[root@localhost yum.repos.d]# wget http://mirrors.aliyun.com/repo/Centos-7.repo
--2019-01-06 08:11:28-- http://mirrors.aliyun.com/repo/Centos-7.repo
Resolving mirrors.aliyun.com (mirrors.aliyun.com)... 115.231.77.118, 115.231.77.119, 115.231.77.115, ...
Connecting to mirrors.aliyun.com (mirrors.aliyun.com)|115.231.77.118|:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 2523 (2.5K) [application/octet-stream]
Saving to: 'Centos-7.repo'

100%[=====] 2,523 --K/s in 0s

2019-01-06 08:11:28 (28.4 MB/s) - 'Centos-7.repo' saved [2523/2523]
```

重命名为 CentOS-Base.repo

#mv Centos-7.repo CentOS-Base.repo

创建缓存

#yum makecache

```
[root@localhost yum.repos.d]# wget http://mirrors.aliyun.com/repo/Centos-7.repo
--2019-01-06 08:11:28-- http://mirrors.aliyun.com/repo/Centos-7.repo
Resolving mirrors.aliyun.com (mirrors.aliyun.com)... 115.231.77.118, 115.231.77.119, 115.231.77.115, ...
Connecting to mirrors.aliyun.com (mirrors.aliyun.com)|115.231.77.118|:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 2523 (2.5K) [application/octet-stream]
Saving to: 'Centos-7.repo'

100%[=====]

2019-01-06 08:11:28 (28.4 MB/s) - 'Centos-7.repo' saved [2523/2523]

[root@localhost yum.repos.d]# ls
Centos-7.repo      CentOS-CR.repo      CentOS-fasttrack.repo  CentOS-Sources.repo
CentOS-Base.repo.bk  CentOS-Debuginfo.repo  CentOS-Media.repo      CentOS-Vault.repo
[root@localhost yum.repos.d]# mv Centos-7.repo CentOS-Base.repo
[root@localhost yum.repos.d]# makecache
bash: makecache: command not found...
[root@localhost yum.repos.d]# yum makecache
Loaded plugins: fastestmirror, langpacks
base
extras
updates
(1/8): extras/7/x86_64/filelists_db
extras/7/x86_64/other_db FAILED =====
http://mirrors.cloud.aliyuncs.com/centos/7/extras/x86_64/repo/bc60c9d624dc97c88bc5a818b3755
rno 14] curl#6 - "Could not resolve host: mirrors.cloud.aliyuncs.com; Name or service not known
Trying other mirror.
(2/8): updates/7/x86_64/filelists_db
(3/8): updates/7/x86_64/other_db
(4/8): extras/7/x86_64/other_db
(5/8): base/7/x86_64/filelists_db
base/7/x86_64/other_db FAILED
```

(5) 安装 SSH

输入 rpm -qa |grep ssh 查找当前系统是否已经安装

查看软件源中是否存在 ssh

#yum list|grep ssh

如果没有安装 SSH 软件包，可以通过 yum

```
#yum install openssh-server.x86_64
```

```
[root@localhost ~]# yum list|grep ssh
ksshaskpass.x86_64                                0.5.3-7.el7                                @anaconda
libssh2.x86_64                                    1.4.3-10.el7_2.1                          @anaconda
openssh.x86_64                                    7.4p1-11.el7                              @anaconda
openssh-clients.x86_64                          7.4p1-11.el7                              @anaconda
openssh-server.x86_64                          7.4p1-11.el7                              @anaconda
fence-agents-ilo-ssh.x86_64                    4.2.1-11.el7_6.1                          updates
libssh.x86_64                                    0.7.1-7.el7                               extras
libssh-devel.x86_64                            0.7.1-7.el7                               extras
libssh2.i686                                    1.4.3-12.el7                              base
libssh2.x86_64                                  1.4.3-12.el7                              base
libssh2-devel.i686                             1.4.3-12.el7                              base
libssh2-devel.x86_64                          1.4.3-12.el7                              base
libssh2-docs.noarch                           1.4.3-12.el7                              base
openssh.x86_64                                  7.4p1-16.el7                              base
openssh-askpass.x86_64                        7.4p1-16.el7                              base
openssh-cavs.x86_64                          7.4p1-16.el7                              base
openssh-clients.x86_64                      7.4p1-16.el7                              base
openssh-keycat.x86_64                       7.4p1-16.el7                              base
openssh-ldap.x86_64                         7.4p1-16.el7                              base
openssh-server.x86_64                       7.4p1-16.el7                              base
openssh-server-sysvinit.x86_64              7.4p1-16.el7                              base
pam_ssh_agent_auth.i686                     0.10.3-2.16.el7                          base
pam_ssh_agent_auth.x86_64                   0.10.3-2.16.el7                          base
sshpass.x86_64                               1.06-2.el7                               extras
[root@localhost ~]# yum install openssh-server.x86_64
```

(6) 修改固定 IP 与主机名称

修改网卡配置

```
#vim /etc/sysconfig/network-scripts/ifcfg-eth0
```

```
NM_CONTROLLED=no #use this file to config network
IPADDR=10.6.1.160 #use this ip address
NETMASK=255.255.255.0 #use this netmask
GATEWAY=10.6.1.254 #use this gateway
TYPE=Ethernet
PROXY_METHOD=none
BROWSER_ONLY=no
#BOOTPROTO=dhcp
BOOTPROTO=static
DEFROUTE=yes
IPV4_FAILURE_FATAL=no
IPV6INIT=yes
IPV6_AUTOCONF=yes
IPV6_DEFROUTE=yes
IPV6_FAILURE_FATAL=no
IPV6_ADDR_GEN_MODE=stable-privacy
#NAME=enp0s31f6
NAME=SERVERA
UUID=e463f341-fa00-4675-b8d4-58562e0e1c58
DEVICE=enp0s31f6
ONBOOT=yes #start when linux start
```

修改/etc/sysconfig/network

```
#vim /etc/sysconfig/network
```

```
# Created by anaconda
NETWORKING=yes
GATEWAY=10.6.1.254
DNS1=223.5.5.5
DNS2=223.6.6.6
~
```

重启服务

```
#service network restart
```

2.安装网络应用服务器（centos7）

（1）安装 xampp

/opt/lampp/bin/	XAMPP 命令库。例如 /opt/lampp/bin/mysql 可执行 MySQL 监视器。
/opt/lampp/htdocs/	Apache 文档根目录。
/opt/lampp/etc/httpd.conf	Apache 配制文件。
/opt/lampp/etc/my.cnf	MySQL 配制文件。
/opt/lampp/etc/php.ini	PHP 配制文件。
/opt/lampp/etc/proftpd.conf	ProFTPD 配制文件。（从 0.9.5 版开始）
/opt/lampp/phpmyadmin/config.inc.php	phpMyAdmin 配制文件。

服务器：testone

通过 wget 下载 xampp

```
#wget https://www.apachefriends.org/xampp-files/7.3.0/xampp-linux-x64-7.3.0-0-installer.run
```

增加可执行权限

```
#chmod +x xampp-linux-x64-7.3.0-0-installer.run
```

运行文件

```
#./xampp-linux-x64-7.3.0-0-installer.run
```

```
[root@localhost ~]# chmod +x xampp-linux-x64-7.3.0-0-installer.run
[root@localhost ~]# ./xampp-linux-x64-7.3.0-0-installer.run
-----
Welcome to the XAMPP Setup Wizard.

-----
Select the components you want to install; clear the components you do not want
to install. Click Next when you are ready to continue.

XAMPP Core Files : Y (Cannot be edited)

XAMPP Developer Files [Y/n] :^C
[root@localhost ~]# ./xampp-linux-x64-7.3.0-0-installer.run
-----
Welcome to the XAMPP Setup Wizard.

-----
Select the components you want to install; clear the components you do not want
to install. Click Next when you are ready to continue.

XAMPP Core Files : Y (Cannot be edited)
```

进入/opt/lamp

运行./lamp security 修改密码

```
[root@localhost ~]# cd /opt/lampp/
[root@localhost lampp]# ls
apache2  COPYING.thirdparty  etc      include  libexec  manager-linux-x64.run  pear      properties.ini  share      var
bin      ctlscrip.sh         htdocs  info     licenses manual               php       README-wsrep   temp      xamp
build    docs                icons   lampp    logs     modules              phpmyadmin RELEASENOTES  uninstall
cgi-bin  error               img     lib      man      mysql                proftpd   sbin           uninstall.dat
```

```
[root@localhost lampp]# ./lampp security
XAMPP: Quick security check...
XAMPP: MySQL is accessible via network.
XAMPP: Normally that's not recommended. Do you want me to turn it off? [yes] yes
```

修改/opt/lamp/etc/extra/httpd-xampp.conf 文件使得 phpmyadmin 可以通过网页访问
找到以下段落

```
<Directory "/opt/lampp/phpmyadmin">
    AllowOverride AuthConfig
```

Require local ...

修改为

```
<Directory "/opt/lampp/phpmyadmin">
    AllowOverride AuthConfig
```

Require all granted ...

设置开机启动

把 xampp 复制到/etc/init.d 下面

```
[root@localhost lampp]# cp xampp /etc/init.d/
[root@localhost lampp]# cd /etc/init.d/
[root@localhost init.d]# ls
functions  netconsole  network  README  xampp
```

编辑 xampp 的头部为

```
#!/bin/sh
```

```
#
```

```
# chkconfig: 2345 80 30
```

```
# description: XAMPP
```

把脚本当作服务进行安装

```
# chkconfig --add xampp
```

```
[root@localhost init.d]# chkconfig --add xampp
[root@localhost init.d]#
```

登录 ftp 即可修改首页

停止 mariaDB 服务

```
#service xampp stopmysql
```

可查看状态来判断

```
[root@iZuf636ko0jzbtre24roheZ init.d]# service xampp status
Version: XAMPP for Linux 7.3.0-0
Apache is running.
MySQL is not running.
ProFTPD is running.
```

设置虚拟目录 ip/dashboard/docs/configure-vhosts.html

修改/opt/lampp/etc/httpd.conf 文件

```
#vim /opt/lampp/etc/httpd.conf
```

把 Include etc/extra/httpd-vhosts.conf 前面的注释去掉

```
# Virtual hosts
Include etc/extra/httpd-vhosts.conf
```

修改 httpd-vhosts.conf 文件

```
#vim /opt/lampp/etc/extra/httpd-vhosts.conf
```

```
<VirtualHost *:80>
    DocumentRoot "/opt/lampp/app"
    ServerName www.zime.com
    <Directory "/opt/lampp/app">
        Options Indexes FollowSymLinks ExecCGI Includes
        AllowOverride All
        Require all granted
    </Directory>
</VirtualHost>
```

```
</VirtualHost>
<VirtualHost *:80>
    DocumentRoot "/opt/lampp/app"
    ServerName www.zime.com
    <Directory "/opt/lampp/app">
        Options Indexes FollowSymLinks ExecCGI Includes
        AllowOverride All
        Require all granted
    </Directory>
</VirtualHost>
```

访问 www.zime.com 即可看到

(2) 安装 MySQL

服务器: testtwo

Yum 下载比较慢

用户名:root 密码: Jsxjf2+

删除本机自带的 mariaDB 数据库

```
# yum remove mariadb;
```

在安装 mysql 的时候, 使用 `yum list | grep mysql` 来查找 yum 源中是否有 mysql, 结果如下

```
[root@iZuf636ko0jzbtre24roheZ /]# yum list|grep mysql
akonadi-mysql.x86_64                1.9.2-4.el7                base
apr-util-mysql.x86_64              1.5.2-6.el7                base
calligra-kexi-driver-mysql.x86_64  2.9.10-2.el7              epel
collectd-mysql.x86_64              5.8.1-1.el7               epel
dmlite-plugins-mysql.x86_64        1.10.4-2.el7              epel
dovecot-mysql.x86_64               1:2.2.36-3.el7            base
dpm-copy-server-mysql.x86_64       1.10.0-5.el7              epel
dpm-name-server-mysql.x86_64       1.10.0-5.el7              epel
dpm-server-mysql.x86_64            1.10.0-5.el7              epel
dpm-srm-server-mysql.x86_64        1.10.0-5.el7              epel
dspam-mysql.x86_64                 3.10.2-12.el7             epel
exim-mysql.x86_64                  4.91-1.el7                epel
```

查资料发现是 CentOS 7 版本将 MySQL 数据库软件从默认的程序列表中移除, 用 mariadb 代替了。

从官网下载 MySQL 加入 MySQL 源

```
#wget http://repo.mysql.com/mysql80-community-release-el7-1.noarch.rpm
```

安装 rpm 包

```
#rpm -Uvh mysql80-community-release-el7-1.noarch.rpm
```

查询 MySQL 的源

```
#yum repolist all | grep mysql
```

```
[root@iZuf636ko0jzbtre24roheZ ~]# yum repolist all | grep mysql
mysql-cluster-7.5-community/x86_64 MySQL Cluster 7.5 Community disabled
mysql-cluster-7.5-community-source MySQL Cluster 7.5 Community - disabled
mysql-cluster-7.6-community/x86_64 MySQL Cluster 7.6 Community disabled
mysql-cluster-7.6-community-source MySQL Cluster 7.6 Community - disabled
mysql-connectors-community/x86_64 MySQL Connectors Community enabled: 74
mysql-connectors-community-source MySQL Connectors Community - disabled
mysql-tools-community/x86_64 MySQL Tools Community enabled: 74
mysql-tools-community-source MySQL Tools Community - Source disabled
mysql-tools-preview/x86_64 MySQL Tools Preview disabled
mysql-tools-preview-source MySQL Tools Preview - Source disabled
mysql55-community/x86_64 MySQL 5.5 Community Server disabled
mysql55-community-source MySQL 5.5 Community Server - disabled
mysql56-community/x86_64 MySQL 5.6 Community Server disabled
mysql56-community-source MySQL 5.6 Community Server - disabled
mysql57-community/x86_64 MySQL 5.7 Community Server disabled
mysql57-community-source MySQL 5.7 Community Server - disabled
mysql80-community/x86_64 MySQL 8.0 Community Server enabled: 49
mysql80-community-source MySQL 8.0 Community Server - disabled
```

修改文件/etc/yum/repos.d/mysql-community.repo 来安装 MySQL5.7

将 MySQL80 属性中的 enable=1 改为 enable=0

将 MySQL57 属性中的 enable=0 改为 enable=1

```
# Enable to use MySQL 5.7
[mysql57-community]
name=MySQL 5.7 Community Server
baseurl=http://repo.mysql.com/yum/mysql-5.7-community/el/7/$basearch/
enabled=1
gpgcheck=1
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-mysql

[mysql80-community]
name=MySQL 8.0 Community Server
baseurl=http://repo.mysql.com/yum/mysql-8.0-community/el/7/$basearch/
enabled=0
gpgcheck=1
"/etc/yum.repos.d/mysql-community.repo" 65L, 1864C
```

使用 yum repolist enabled | grep mysql 查看 mysql 将会安装的情况

```
#yum repolist enabled | grep mysql
```

```
[root@iZuf636ko0jzbt24roheZ ~]# yum repolist enabled | grep mysql
mysql-connectors-community/x86_64 MySQL Connectors Community 74
mysql-tools-community/x86_64 MySQL Tools Community 74
mysql57-community/x86_64 MySQL 5.7 Community Server 307
```

使用 yum install mysql-community-server 安装 MySQL

```
#yum install mysql-community-server
```

```
[root@iZuf636ko0jzbt24roheZ ~]# yum install mysql-community-server
Loaded plugins: fastestmirror
Loading mirror speeds from cached hostfile
Resolving Dependencies
--> Running transaction check
--> Package mysql-community-server.x86_64 0:5.7.24-1.el7 will be installed
```

```
#sudo service mysqld start
```

启动 MySQL 服务

```
[root@iZuf636ko0jzbt24roheZ ~]# service mysqld status
Redirecting to /bin/systemctl status mysqld.service
● mysqld.service - MySQL Server
   Loaded: loaded (/usr/lib/systemd/system/mysqld.service; enabled; vendor preset: disabled)
   Active: active (running) since Mon 2019-01-07 23:11:11 CST; 3s ago
     Docs: man:mysqld(8)
           http://dev.mysql.com/doc/refman/en/using-systemd.html
   Process: 18094 ExecStart=/usr/sbin/mysqld --daemonize --pid-file=/var/run/mysqld/mysqld.pid $MYSQLD_OPTS (code=exited, status=0/SUCCESS)
   Process: 18021 ExecStartPre=/usr/bin/mysqld_pre_systemd (code=exited, status=0/SUCCESS)
  Main PID: 18097 (mysqld)
    CGroup: /system.slice/mysqld.service
            └─18097 /usr/sbin/mysqld --daemonize --pid-file=/var/run/mysqld/mysqld.pid

Jan 07 23:11:06 iZuf636ko0jzbt24roheZ systemd[1]: Starting MySQL Server...
Jan 07 23:11:11 iZuf636ko0jzbt24roheZ systemd[1]: Started MySQL Server.
[root@iZuf636ko0jzbt24roheZ ~]#
```

```
#sudo grep 'temporary password' /var/log/mysqld.log
```

显示初始密码

```
[root@iZuf636ko0jzbt24roheZ ~]# grep 'temporary password' /var/log/mysqld.log
2019-01-07T15:11:07.362211Z 1 [Note] A temporary password is generated for root@localhost: #0;M9ldmA-wM
[root@iZuf636ko0jzbt24roheZ ~]#
```

进入 MySQL 修改密码

```
ALTER USER 'root'@'localhost' IDENTIFIED BY '你的密码'
```

```
[root@iZuf636ko0jzbtre24roheZ ~]# grep 'temporary password' /var/log/mysql.log
2019-01-07T15:11:07.362211Z 1 [Note] A temporary password is generated for root@localhost: #0;M9ldmA-wM
[root@iZuf636ko0jzbtre24roheZ ~]# mysql -u root -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 3
Server version: 5.7.24

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> alter user 'root'@'localhost' identified by 'fanliyong8880+';
ERROR 1819 (HY000): Your password does not satisfy the current policy requirements
mysql> alter user 'root'@'localhost' identified by 'Fanliyong8880+';
Query OK, 0 rows affected (0.00 sec)
```

设置密码等级强度

mysql>set global validate_password_policy=0; #密码强度设为最低等级

mysql>set global validate_password_length=4; #密码允许最小长度为 4

mysql>flush privileges; #更新授权表，生效

修改设置创建账户 admin 使用密码 Admin+使得可以远程访问

GRANT ALL ON *.* TO 'root'@'%' IDENTIFIED BY 'Fanliyong8880+' WITH GRANT OPTION;

刷新设置

FLUSH PRIVILEGES;

```
mysql> GRANT ALL ON *.* TO 'root'@'%' IDENTIFIED BY 'Fanliyong8880+' WITH GRANT OPTION;
Query OK, 0 rows affected, 1 warning (0.00 sec)

mysql> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.00 sec)
```

(3) 安装 tomcat

服务器: testone

首先安装 Java

#sudo yum install java-1.8.0-openjdk-devel

下载 tomcat

#wget https://mirrors.tuna.tsinghua.edu.cn/apache/tomcat/tomcat-8/v8.5.37/bin/apache-tomcat-8.5.37.tar.gz

解压 tomcat

#tar -zxvf apache-tomcat-8.5.37.tar.gz

```
[root@localhost ~]# wget https://mirrors.tuna.tsinghua.edu.cn/apache/tomcat/tomcat-8/v8.5.37/bin/apache-tomcat-8.5.37.tar.gz
--2019-01-08 11:55:15-- https://mirrors.tuna.tsinghua.edu.cn/apache/tomcat/tomcat-8/v8.5.37/bin/apache-tomcat-8.5.37.tar.gz
Resolving mirrors.tuna.tsinghua.edu.cn (mirrors.tuna.tsinghua.edu.cn)... 101.6.8.193, 2402:f000:1:408:8100::1
Connecting to mirrors.tuna.tsinghua.edu.cn (mirrors.tuna.tsinghua.edu.cn)|101.6.8.193|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 9653382 (9.2M) [application/x-gzip]
Saving to: 'apache-tomcat-8.5.37.tar.gz'

100%[=====>] 9,653,382 2019-01-08 11:55:19 (2.56 MB/s) - 'apache-tomcat-8.5.37.tar.gz' saved [9653382/9653382]

[root@localhost ~]# tar -zxvf apache-tomcat-8.5.37.tar.gz
```

转移到/opt 文件夹下面复制/opt/apache-tomcat-8.5.37/bin/catalina.sh 到/etc/init.d 下并改名为 tomcat

```
[root@localhost ~]# mv apache-tomcat-8.5.37 /opt/
[root@localhost ~]# cd /opt/apache-tomcat-8.5.37/bin/
[root@localhost bin]# ls
bootstrap.jar  catalina-tasks.xml  configtest.bat  digest.bat  setclasspath.sh  startup.bat  tomcat-native.tar.gz  version.bat
catalina.bat  commons-daemon.jar  configtest.sh  digest.sh  shutdown.bat  startup.sh  tool-wrapper.bat  version.sh
catalina.sh  commons-daemon-native.tar.gz  daemon.sh  setclasspath.bat  shutdown.sh  tomcat-juli.jar  tool-wrapper.sh
[root@localhost bin]# cp catalina.sh /etc/init.d/tomcat
[root@localhost bin]#
```

编辑 tomcat 在#OS specific support 前面增加

#chkconfig: 2345 10 90

#description:Tomcat service

CATALINA_HOME=/opt/apache-tomcat-8.5.37

JAVA_HOME=/usr/lib/jvm/java-1.8.0-openjdk

```
#chkconfig:2345 10 90
#description:Tomcat service
CATALINA_HOME=/opt/apache-tomcat-8.5.37
JAVA_HOME=/usr/lib/jvm/java-1.8.0-openjdk
# OS specific support. $var _must_ be set to either true or false.
cygwin=false
darwin=false
os400=false
```

添加到开机自启动

#chkconfig --add tomcat

#systemctl enable tomcat

```
[root@localhost init.d]# systemctl enable tomcat
tomcat.service is not a native service, redirecting to /sbin/chkconfig.
Executing /sbin/chkconfig tomcat on
[root@localhost init.d]# systemctl status tomcat
● tomcat.service - SYSV: Tomcat service
   Loaded: loaded (/etc/rc.d/init.d/tomcat; bad; vendor preset: disabled)
   Active: inactive (dead)
     Docs: man:systemd-sysv-generator(8)
[root@localhost init.d]# systemctl start tomcat
[root@localhost init.d]# systemctl status tomcat
● tomcat.service - SYSV: Tomcat service
   Loaded: loaded (/etc/rc.d/init.d/tomcat; bad; vendor preset: disabled)
   Active: active (exited) since Tue 2019-01-08 15:44:07 +07; 2s ago
     Docs: man:systemd-sysv-generator(8)
  Process: 10030 ExecStart=/etc/rc.d/init.d/tomcat start (code=exited, status=0/SUCCESS)

Jan 08 15:44:07 localhost.localdomain systemd[1]: Starting SYSV: Tomcat service...
Jan 08 15:44:07 localhost.localdomain tomcat[10030]: Tomcat started.
Jan 08 15:44:07 localhost.localdomain systemd[1]: Started SYSV: Tomcat service.
[root@localhost init.d]#
```

3.安装 DNS、DHCP 服务以及 freeradius

(1) 安装 DNS 服务

服务器: testone

IP: 10.6.1.8

端口: 53

安装 bind

#yum install bind*

查看安装情况

#rpm -qa bind*

```
[root@localhost ~]# rpm -qa bind*
bind-9.9.4-72.el7.x86_64
bind-libs-lite-9.9.4-72.el7.x86_64
bind-pkcs11-devel-9.9.4-72.el7.x86_64
bind-pkcs11-libs-9.9.4-72.el7.x86_64
bind-dyndb-ldap-11.1-4.el7.x86_64
bind-lite-devel-9.9.4-72.el7.x86_64
bind-utils-9.9.4-72.el7.x86_64
bind-libs-9.9.4-72.el7.x86_64
bind-pkcs11-utils-9.9.4-72.el7.x86_64
bind-sdb-9.9.4-72.el7.x86_64
bind-chroot-9.9.4-72.el7.x86_64
bind-sdb-chroot-9.9.4-72.el7.x86_64
bind-pkcs11-9.9.4-72.el7.x86_64
bind-devel-9.9.4-72.el7.x86_64
bind-license-9.9.4-72.el7.noarch
```

通过修改 named.conf 来配置 dns 绑定的 ip,可以访问的人等

```
#vim /etc/named.conf
```

修改 allow-query { localhost; };为 allow-query {any};

修改 listen-on port 53 {127.0.0.1; };为 listen-on port 53 {127.0.0.1; any};

使任何任都能访问 DNS 服务

设定了这个, 如果访问外网的网站 dns 主机也能解析 223.5.5.5 223.6.6.6 为阿里云的 DNS

```
forwarders { 114.114.114.114;223.5.5.5;223.6.6.6; };
```

修改最后的 include "/etc/named.rfc1912.zones";

```
options {
    listen-on port 53 { 127.0.0.1;any;};
    listen-on-v6 port 53 { ::1; };
    directory "/var/named";
    dump-file "/var/named/data/cache_dump.db";
    statistics-file "/var/named/data/named_stats.txt";
    memstatistics-file "/var/named/data/named_mem_stats.txt";
    recursing-file "/var/named/data/named.recursing";
    secroots-file "/var/named/data/named.secroots";
    allow-query { any; };
    forwarders {114.114.114.114;223.5.5.5;223.6.6.6;};
    /*
```

为 include "/etc/named.zones";

```
include "/etc/named.zones";
include "/etc/named.root.key";
```

带权限复制 named.rfc1912.zones 为 named.zones

```
# cp -a named.rfc1912.zones named.zones
```

修改 named.zones 添加正向解析

```
#vim /etc/named.zones
```

在文件中添加

```
zone "zime.com" IN{
    type master;
    file "zime.com.zone";
    allow-update { none; };
};
```

```
zone "zime.com" IN{
    type master;
    file "zime.com.zone";
    allow-update { none; };
};
```

进入文件夹

```
#cd /var/named/
```

带权限复制 named.localhost.zone 文件

```
#cp -a named.localhost fly.com.zone
```

编辑 fly.com.zone 文件

```
$TTL 1D
```

```
@ IN SOA fly.com. admin.fly.com. (
    0 ; serial :
    1D ; refresh # 主从刷新时间
    1H ; retry # 主从通讯失败后重试间隔
    1W ; expire # 缓存过期时间
    3H ) ; minimum # 没有 TTL 定义时的最小生存周期
NS ns1.fly.com.
NS ns2.fly.com.
A 127.0.0.1
AAAA ::1
MX 10 mx.fly.com.
```

```
ttl IN A 1.1.1.2
```

```
www IN A 1.1.1.1 #www 地址对应的 ip
```

```
bbs IN CNAME www
```

```
mx IN A 1.1.1.6
```

```
ns1 IN A 1.1.1.11 #ns1 对应的 ip
```

```
ns2 IN A 1.1.1.11 #ns2 对应的 ip
```

```

$TTL 1D
@ IN SOA zime.com. admin.zime.com. (
    0 ; serial :
    1D ; refresh # 主从刷新时间
    1H ; retry # 主从通讯失败后重试间隔
    1W ; expire # 缓存过期时间
    3H ) ; minimum # 没有TTL定义时的最小生存周期
    NS ns1.zime.com.
    NS ns2.zime.com.
    A 127.0.0.1
    AAAA ::1
    MX 10 mx.zime.com.
ttl IN A 10.6.1.6
www IN A 10.6.1.6
bbs IN CNAME www
mx IN A 10.6.1.6
ns1 IN A 10.6.1.6
ns2 IN A 10.6.1.6

```

启动服务

```
#systemctl start named
```

把服务加入开机自启动

```
#systemctl enable named
```

设置 DNS 服务

```
#vim /etc/sysconfig/network-scripts/你的网卡名字
```

```

DEVICE=enp2s0
ONBOOT=yes
DNS1=10.6.1.8
DNS2=223.5.5.5
~

```

(2) 安装 DHCP 服务

服务器:testone

IP: 10.6.1.8

从 yum 源安装

```
#yum install dhcp*
```

修改 dhcpd 服务配置规定网卡

```
#vim /etc/sysconfig/dhcpd
```

```
DHCPDARGS="enp2s0"
```



```
# example:
# $ cp /usr/lib/systemd/system/dhcpd.service /etc
# $ vi /etc/systemd/system/dhcpd.service
# $ ExecStart=/usr/sbin/dhcpd -f -cf /etc/dhcp/dh
# $ systemctl --system daemon-reload
# $ systemctl restart dhcpd.service
DHCPDARGS="enp2s0"
```

配置 DHCP 服务全局配置

#vim /etc/dhcp/dhcpd.conf

以下为具体配置

```
option domain-name "";
option domain-name-servers 10.6.1.8;
default-lease-time 600;
max-lease-time 7200;
log-facility local7;
subnet 10.6.1.0 netmask 255.255.255.0 {
    range 10.6.1.80 10.6.1.89;
    option routers 10.6.1.254;
}
```

```
option domain-name "";
option domain-name-servers 10.6.1.8;
default-lease-time 600;
max-lease-time 7200;
log-facility local7;
subnet 10.6.1.0 netmask 255.255.255.0 {
    range 10.6.1.80 10.6.1.89;
    option routers 10.6.1.254;
}
```

启动 DHCP 服务

#systemctl start dhcpd

开启开机启动

#systemctl enable dhcpd

查看端口开启情况

#netstat -tlunp |grep dhcp

定时查看日志文件的输出信息

#tail -n 30 /var/log/messages

(3) 安装 freeradius

参考：<http://www.beijinghuayu.com.cn/centos7-freeradius-mysql> 配置/

服务器: testtwo

IP: 10.6.10.6

安装 freeradius

```
# yum install freeradius-devel freeradius-utils freeradius-mysql
```

在数据库当中创建 radius 数据库并将

/etc/raddb/mods-config/sql/main/mysql/schema.sql 导入

修改 freeradius 配置文件, 以便使用 sql 数据库

```
#vim /etc/raddb/radiusd.conf
```

将下面三项内容修改为 yes

```
auth = no
```

```
auth_badpass = no
```

```
auth_goodpass = no
```

修改为

```
auth = yes
```

```
auth_badpass = yes
```

```
auth_goodpass = yes
```

修改 default 文件

```
vim /etc/raddb/sites-available/default
```

将

```
-sql
```

修改为

```
sql
```

查找到 session { 中内容

去掉 sql 前面的注释

```
#vim /etc/raddb/mods-available/sql
```

```
1)将
driver = "rlm_sql_null"
修改为
driver = "rlm_sql_mysql"
(2)将
    dialect = "sqlite"
#    server = "localhost"
#    port = 3306
#    login = "radius"
#    password = "radpass"
修改为
    dialect = "mysql"
    server = "localhost"
    port = 3306
    login = "radius"
    password = "passwd-radius"
(3)将
#    read_clients = yes
修改为
    read_clients = yes
```

拷贝 sql 文件到/etc/raddb/mods-enabled/

```
#ln -s /etc/raddb/mods-available/sql /etc/raddb/mods-enabled/
```

帐号信息是添加在 radius 库的 radcheck 表里面:

```
mysql>insert into radcheck set username='guest', attribute='Cleartext-Password', op=':=',
value='testpassword';
```

编辑客户端文件

```
#vim clients.conf
```

```
client tplinkAP {
    ipv4addr  =      0.0.0.0/0
    secret    =      12345678
}
```

```
client tplinkAP {
    ipv4addr      =      0.0.0.0/0
    secret        =      12345678
}
```

4、配置 AP