



链滴

cobbler 服务自动化部署 SHELL

作者: [Carey](#)

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来源网站: [链滴](#)

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```
#!/bin/bash
#
#*****
#Author:zhangzhuo
#QQ: 1191400158
#Date: 2021-02-10
#FileName: install_cobbler_centos7.sh
#URL: https://www.zhangzhuo.ltd
#Description: The test script
#Copyright (C): 2021 All rights reserved
#*****
. /etc/init.d/functions

variable(){
#初始变量设置
#cobbler服务器地址
cobbler_server=192.168.10.71
#dhcp分配网段及子网掩码
subnet=192.168.10.0
netmask=255.255.255.0
#dhcp分配网关
routers=192.168.10.2
#dhcp服务器地址
dns=114.114.114.114
#dhcp地址池
range="192.168.10.100 192.168.10.200"
}

#安装软件
install_yum(){
yum install cobbler cobbler dhcp -y
[ $? = 0 ] && action "必备软件安装成功" || action "软件安装失败请检查YUM源" false
```

```

systemctl enable --now cobblerd.service httpd.service tftp.service &>/dev/null
systemctl is-active tftp.service &>/dev/null && action "TFTP服务启动成功" || action "TFTP服务启动失败" false
systemctl is-active httpd.service &>/dev/null && action "HTTP服务启动成功" || action "HTTP服务启动失败" false
systemctl is-active cobblerd.service &>/dev/null && action "cobbler服务启动成功" || { action "cobbler服务启动失败" false; }
}
#配置cobbler服务
set_cobbler(){
variable
sed -ri 's/^(default_password_crypted:).*\1 "$1$yB26sGrf$JPTQcfvTWXKBZRs0o9F7B1"/' /etc/cobbler/settings
sed -ri "s/^(next_server:).*\1 $cobbler_server/" /etc/cobbler/settings
sed -ri "s/^(server:).*\1 $cobbler_server/" /etc/cobbler/settings
sed -ri 's/^(manage_dhcp:).*\1 1/' /etc/cobbler/settings
sed -ri 's/^(pxe_just_once:).*\1 1/' /etc/cobbler/settings
systemctl restart cobblerd.service
systemctl is-active cobblerd.service &>/dev/null && action "cobbler服务重启成功" || { action "cobbler服务重新启动失败" false;exit; }
}
#配置dhcp服务
set_dhcp(){
variable
sed -ri "s/^(subnet) .* (netmask) 255.255.255.0 (\{)\1 ${subnet} \2 ${netmask} \3/" /etc/cobbler/dhcp.template
sed -ri "s/^[^a-z](option routers[^\0-9]*)[0-9]+.*\1${routers};/" /etc/cobbler/dhcp.template
sed -ri "s/^[^a-z](option domain-name-servers[^\0-9]*)[0-9]+.*\1${dns};/" /etc/cobbler/dhcp.template
sed -ri "s/^[^a-z](option subnet-mask[^\0-9]*)[0-9]+.*\1${netmask};/" /etc/cobbler/dhcp.template
sed -ri "s/^[^a-z](range dynamic-bootp[^\0-9]*)[0-9]+.*\1${range};/" /etc/cobbler/dhcp.template
cobbler sync &>/dev/null
systemctl enable --now dhcpd.service &>/dev/null
}
#准备启动文件
get_cobbler(){
cobbler get-loaders &>/dev/null && action "启动文件下载完成" || { action "启动文件下载失败" false;exit; }
sed -ri 's/(ENU TITLE Cobbler \ |).*\1 https://zhangzhuo.ltd/' /etc/cobbler/pxe/pxedefault.template
cobbler sync &>/dev/null
systemctl is-active dhcpd.service &>/dev/null && action "DHCP服务启动成功" || action "DHCP服务启动失败" false
action "cobbler服务安装完"
}

cobbler_install(){
install_yum
set_cobbler
set_dhcp
get_cobbler
}

```

```

create_ks(){
cat <<EOF >/var/lib/cobbler/kickstarts/ks-centos6.cfg
#platform=x86, AMD64, or Intel EM64T
#version=DEVEL
# Install OS instead of upgrade
install
# Keyboard layouts
keyboard 'us'
# Root password
rootpw --iscrypted \$1\$NxU3dKmV\$fRjv0NpyNJv6sQSK2SEh//
# System language
lang en_US.UTF-8
# System authorization information
auth --useshadow --passalgo=sha512
# Use text mode install
text
# SELinux configuration
selinux --disabled
# Do not configure the X Window System

authconfig --enablesshadow --passalgo=sha512
# Firewall configuration
firewall --disabled
# Network information
network --onboot yes --bootproto=dhcp --device=eth0 --noipv6
# Reboot after installation
reboot
# System timezone
timezone Asia/Shanghai
# Use network installation
url --url=\$tree
# System bootloader configuration
bootloader --append="crashkernel=auto rhgb quiet" --location=mbr --driveorder=sda
# Clear the Master Boot Record
zerombr
# Partition clearing information
clearpart --all --initlabel
# Disk partitioning information
part /boot --fstype="ext4" --size=2048
part / --fstype="ext4" --size=10240
part /data --fstype="ext4" --size=2048
part swap --fstype="swap" --size=1024

%post
%end

%packages
@development
@mail-server

%end
EOF

```

```
cat <<EOF >/var/lib/cobbler/kickstarts/ks-centos7.cfg
#platform=x86, AMD64, or Intel EM64T
#version=DEVEL
# Install OS instead of upgrade
install
# Keyboard layouts
keyboard 'us'
# Root password
rootpw --iscrypted \$1\$NxU3dKmV\$fRJv0NpyNJv6sQSK2SEh//
# System language
lang en_US
# System authorization information
auth --useshadow --passalgo=sha512
# Use text mode install
text
# SELinux configuration
selinux --disabled
# Do not configure the X Window System
skipx
```

```
# Firewall configuration
firewall --disabled
# Network information
network --bootproto=dhcp --device=eth0
# Reboot after installation
reboot
# System timezone
timezone Asia/Shanghai
# Use network installation
url --url=\$tree
# System bootloader configuration
bootloader --append="net.ifnames=0" --location=mbr
# Clear the Master Boot Record
zerombr
# Partition clearing information
clearpart --all --initlabel
# Disk partitioning information
part /boot --fstype="ext4" --size=2048
part / --fstype="ext4" --size=10240
part /data --fstype="ext4" --size=2048
part swap --fstype="swap" --size=1024
```

```
%post
%end
```

```
%packages
@development
@mail-server
```

```
%end
EOF
```

```
cat <<EOF >/var/lib/cobbler/kickstarts/ks-centos8.cfg
#version=RHEL8
```

```
ignoredisk --only-use=sda
# Partition clearing information
# Use graphical install
text
zerombr
reboot
clearpart --all --initlabel
selinux --disabled
firewall --disabled
# Use CDROM installation media
url --url=\$tree
# Keyboard layouts
keyboard --vckeymap=us --xlayouts='us'
# System language
lang en_US.UTF-8

# Network information
bootloader --append="net.ifnames=0" --location=mbr --boot-drive=sda
network --bootproto=dhcp --device=eth0 --ipv6=auto --activate
network --hostname=localhost.localdomain
# Root password
rootpw --iscrypted \$6\$q76Q7kMy.HLaa0Jc\$pN1iBqDhYaNZNqLxV.8Qz8QwxgRYB3NXt7/1i
n4buFXhI8GrYUj3hzYhN5Bdw5LzmmZAbXEg9KNx8cC67J73.
# Run the Setup Agent on first boot
firstboot --enable
# Do not configure the X Window System
skipx
# System services
services --disabled="chronyd"
# System timezone
timezone Asia/Shanghai --isUtc --nontp
#Disk partitioning information
part /boot --fstype="ext4" --size=2048
part / --fstype="ext4" --size=10240
part /data --fstype="ext4" --size=2048
part swap --fstype="swap" --size=1024

%packages
@^minimal-environment
vim
tree
wget
curl
%end

%addon com_redhat_kdump --disable --reserve-mb='auto'

%end

%anaconda
pwpolicy root --minlen=6 --minquality=1 --notstrict --nochanges --notempty
pwpolicy user --minlen=6 --minquality=1 --notstrict --nochanges --emptyok
pwpolicy luks --minlen=6 --minquality=1 --notstrict --nochanges --notempty
```

```

%end
EOF
[ -e /var/lib/cobbler/kickstarts/ks-centos6.cfg ] && action "centos6应答文件已经生成" || action
centos6应答文件生成失败" false
[ -e /var/lib/cobbler/kickstarts/ks-centos7.cfg ] && action "centos7应答文件已经生成" || action
centos7应答文件生成失败" false
[ -e /var/lib/cobbler/kickstarts/ks-centos8.cfg ] && action "centos8应答文件已经生成" || action
centos8应答文件生成失败" false
}

```

```

cobbler_put_os(){
read -p "上传系统名称:(推荐使用centos-8.2) " OS_NAME
read -p "系统磁盘挂载路径:(示范/mnt/centos8.2) " FILE
echo "上传过程较慢请耐心等待....."
echo "上传位置为/var/www/cobbler/ks_mirror/${OS_NAME}-x86_64"
cobbler import --name=${OS_NAME}-x86_64 --path=${FILE} --arch=x86_64 && action "上传
成" || action "上传失败" false
}

```

```

ks_install(){
[ -e /var/lib/cobbler/kickstarts/ks-centos8.cfg ] || { action "请先生成应答文件" false;return; }
[ -e /var/lib/cobbler/kickstarts/ks-centos7.cfg ] || { action "请先生成应答文件" false;return; }
[ -e /var/lib/cobbler/kickstarts/ks-centos6.cfg ] || { action "请先生成应答文件" false;return; }
echo "现有镜像:"
echo "`cobbler profile list`"
read -p "请输入要应用的系统镜像名称:" NAME_OS
{ cobbler profile list | grep $NAME_OS; } || { action "没有这个镜像" false;return;}
read -p "请确认centos版本(6,7,8):" VERSION
if [ $VERSION -eq 6 ] &>/dev/null;then
    i=6
elif [ $VERSION -eq 7 ] &>/dev/null;then
    i=7
elif [ $VERSION -eq 8 ] &>/dev/null;then
    i=8
else
    action "输入错误" false ; return
fi
cobbler profile remove --name=${NAME_OS}
cobbler profile add --name=${NAME_OS} --distro=${NAME_OS} --kickstart=/var/lib/cobbler/
ickstarts/ks-centos${i}.cfg && action "应用成功" || action "应用失败" false
}

```

```

PS3="请选择相应的编号(1-5):"
MENU="
cobbler安装
cobbler上传系统镜像
cobbler自定义应答文件生成

```

cobbler使用应答文件

退出

```
"  
  
select menu in $MENU;do  
case $REPLY in  
1)  
  cobbler_install  
  ;;  
2)  
  cobbler_put_os  
  ;;  
3)  
  create_ks  
  ;;  
4)  
  ks_install  
  ;;  
5)  
  break  
  ;;  
*)  
  echo -e "输入错误,请输入正确的数字(1-5)"  
  ;;  
esac  
done
```

注意事项:

- 部署只能部署在centos7系统
- 上传镜像需注意无法上传centos8.3镜像，有报错信息。有解决方案自行百度
- 上传镜像后直接可以进行系统部署，部署方式为默认最小化，部署后root密码为123456
- 如要使用自定义应答文件请正确选择版本否则部署会报错