LFS-BOOK-8.1-systemd

Subtitle

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Table of Contents

LFS-BOOK-8.1-systemd 1
粘滞位 1
创建目录的操作方式 1
ln相关 1
grep 2
timeout命令 2
grub配置 2
无法启动的处理 3
成果 4

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粘滞位

保证所有用户对目录 /tmp 和 /var/tmp 都是可写的，但又不能移除其他用户的文件。后面的这个限制是由所谓的“ 粘滞位 ”实现的，即位掩码 1777 中的最高位（1）。

创建目录的操作方式

/usr/{,local/}{bin,include} 为/usr/ 和/usr/local创建相同的目录结构

```
I have no name!:/# mkdir -pv /usr/{,local/}{bin,include,lib,sbin,src}
mkdir: created directory '/usr'
mkdir: created directory '/usr/bin'
mkdir: created directory '/usr/include'
mkdir: created directory '/usr/lib'
mkdir: created directory '/usr/sbin'
mkdir: created directory '/usr/src'
mkdir: created directory '/usr/local'
mkdir: created directory '/usr/local/bin'
mkdir: created directory '/usr/local/include'
mkdir: created directory '/usr/local/lib'
mkdir: created directory '/usr/local/sbin'
mkdir: created directory '/usr/local/src'
```

{1..8} 循环创建

```
I have no name!:/# mkdir -pv /usr/{,local/}share/man/man{1..8}
mkdir: created directory '/usr/share/man/man1'
mkdir: created directory '/usr/share/man/man2'
mkdir: created directory '/usr/share/man/man3'
mkdir: created directory '/usr/share/man/man4'
mkdir: created directory '/usr/share/man/man5'
mkdir: created directory '/usr/share/man/man6'
mkdir: created directory '/usr/share/man/man7'
mkdir: created directory '/usr/share/man/man8'
mkdir: created directory '/usr/local/share/man/man1'
mkdir: created directory '/usr/local/share/man/man2'
mkdir: created directory '/usr/local/share/man/man3'
mkdir: created directory '/usr/local/share/man/man4'
mkdir: created directory '/usr/local/share/man/man5'
mkdir: created directory '/usr/local/share/man/man6'
mkdir: created directory '/usr/local/share/man/man7'
mkdir: created directory '/usr/local/share/man/man8'
```

ln相关

原文件指定了完整路径，目标只需要目录即可

```
I have no name!:/# ln -sv /tools/lib/libgcc_s.so{,.1} /usr/lib
```

```
'/usr/lib/libgcc_s.so' -> '/tools/lib/libgcc_s.so'
'/usr/lib/libgcc_s.so.1' -> '/tools/lib/libgcc_s.so.1'
```

grep

```
root:/sources/glibc-2.25/build# grep -o '/usr/lib.*/crt[1in].*succeeded' dummy.log
/usr/lib/../lib/crt1.o succeeded
/usr/lib/../lib/crti.o succeeded
/usr/lib/../lib/crtn.o succeeded
root:/sources/glibc-2.25/build# grep --help |grep '\-o'
  -b, --byte-offset         print the byte offset with output lines
  -o, --only-matching       show only the part of a line matching PATTERN
  -u, --unix-byte-offsets   report offsets as if CRs were not there
```

```
root:/sources/glibc-2.25/build# grep --help |grep '\-B'
  -B, --before-context=NUM  print NUM lines of leading context
root:/sources/glibc-2.25/build#
root:/sources/glibc-2.25/build#
root:/sources/glibc-2.25/build# grep -B2 '^ /usr/include' dummy.log
#include "..." search starts here:
#include <...> search starts here:
 /usr/include
```

timeout命令

使用netstat -ntlp或者 ss -lntp进行端口自发现时，如果文件描述符过多，速度会非常慢，可能导致机器负载飙升，使用timeout可以解决此问题：

```
[root@tv.router ~]# timeout 1 netstat -ntlp
Active Internet connections (only servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         State       PID/Program name
tcp        0      0 0.0.0.0:10050           0.0.0.0:*               LISTEN      15641/zabbix_agentd
tcp        0      0 127.0.0.1:199           0.0.0.0:*               LISTEN      3889/snmpd
tcp        0      0 0.0.0.0:80              0.0.0.0:*               LISTEN      14287/nginx
tcp        0      0 0.0.0.0:30000           0.0.0.0:*               LISTEN      2591/monit
tcp        0      0 127.0.0.1:53            0.0.0.0:*               LISTEN      2077/dnsmasq
tcp        0      0 0.0.0.0:22              0.0.0.0:*               LISTEN      3904/sshd
tcp        0      0 0.0.0.0:5080            0.0.0.0:*               LISTEN      29673/python2.7
tcp        0      0 127.0.0.1:25            0.0.0.0:*               LISTEN      13836/sendmail
tcp        0      0 0.0.0.0:443             0.0.0.0:*               LISTEN      14287/nginx
```

grub配置

直接使用宿主机的grub，添加配置即可

```
title LFS-8.0-systemd (4.9.9)
    root (hd0,0)
    kernel /vmlinuz-4.9.9-lfs-8.0-rc1-systemd root=/dev/sde1 ro
```

无法启动的处理

报错

```
Kernel panic Error - not syncing: VFS: unable to mount rootfs on unknown-block(0,0)
```

可能的原因：

1. make menuconfig时没有严格按照手册
2. 缺少VMware驱动

VMware驱动参考一下2个网页

- https://golfreeze.packetlove.com/smileboard/index.php?topic=703.0;wap2
- http://blog.csdn.net/shile/article/details/53540224



在Vmware虚拟机里面编译lfs 7.10的内核后，启动出现如下错误:
kernel panic -not syncing:VFS:Unable to mount root fs on unknown block(0,0)

可能的原因：
1- scsi驱动没有编译到内核,检查如下的选项是否选择
→ Device Drivers→ SCSI device support
<> *SCSI disk support*
<

> SCSI generic support\\

→ Device Drivers→ SCSI device support→ SCSI low-level drivers
-- *LSI MPT Fusion SAS 3.0 & SAS 2.0 Device Driver*
(128) LSI MPT Fusion SAS 2.0 Max number of SG Entries (16 - 256)
(128) LSI MPT Fusion SAS 3.0 Max number of SG Entries (16 - 256)
<

> Legacy MPT2SAS config option\\

→ Device Drivers
[*] Fusion MPT device support —>

→ Device Drivers→ Fusion MPT device support
— Fusion MPT device support
<> *Fusion MPT ScsiHost drivers for SPI*
<

> Fusion MPT ScsiHost drivers for SAS \\

(

128) Maximum number of scatter gather entries (16 - 128)
<> *Fusion MPT misc device (ioctl) driver*
/] Fusion MPT logging facility

golfreeze:
LFS 7.7 End Kernel panic Error - not syncing: VFS: unable to **mount** rootfs on unknown-block(0,0)

If your system running on Vmware program [Esx-i , vmare]
please kindly re-install kernel with build in "VMware VMCI Driver" + "VMware PVSCSI driver"

เข้าไปที่ folder= Linux-3.19

```
#echo $LANG
#make LANG=en_GB.ISO-8859-1 LC_ALL= menuconfig

# All options are required unless noted as "Optional" or under a # Begin and # End block, which is also noted as "Optional" or "Hardware Specific"
# It is important that they are selected as built-in or the kernel might fail to correctly detect the partitions and/or filesystems.
# It is a good idea to run "make defconfig" first

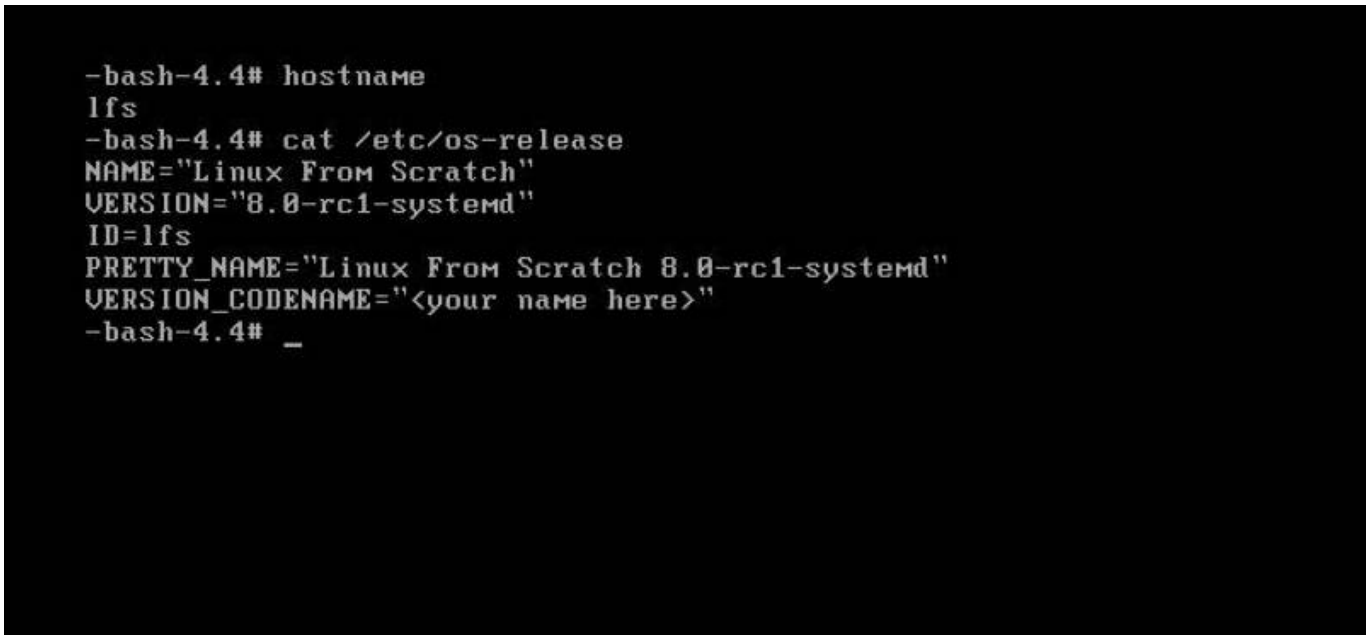
Device Drivers  --->
  Generic Driver Options  --->
   () path to uevent helper
   [*] Maintain a devtmpfs filesystem to mount at /dev
   [*]   Automount devtmpfs at /dev, after the kernel mounted the rootfs (optional)

 # Optional, required for VMware virtual machines
 # Begin here
  Misc devices  --->
   <*> VMware VMCI Driver
 # End here

 # Optional, required for VMware virtual machines
 # Begin here
   [*] SCSI low-level drivers  --->
     <*>   BusLogic SCSI support (used by older VMware virtual solutions, can be optionally selected)
     <*>   VMware PVSCSI driver support (used by vSphere I think, but not by default, can be used by Player and Workstation too)
 # End here
```

成果


lfs login: _


-bash-4.4# hostname
lfs
-bash-4.4# cat /etc/os-release
NAME="Linux From Scratch"
VERSION="8.0-rc1-systemd"
ID=lfs
PRETTY_NAME="Linux From Scratch 8.0-rc1-systemd"
VERSION_CODENAME="<your name here>"
-bash-4.4# _

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