

```
^C
--- 192.168.150.92 ping statistics ---
1 packets transmitted, 0 received, 100% packet loss, time 0ms

vint@ha ~ $ ping 192.168.150.93
PING 192.168.150.93 (192.168.150.93) 56(84) bytes of data.
64 bytes from 192.168.150.93: icmp_seq=1 ttl=64 time=9.01 ms
64 bytes from 192.168.150.93: icmp_seq=2 ttl=64 time=2.98 ms
^C
--- 192.168.150.93 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 999ms
rtt min/avg/max/mdev = 2.989/6.003/9.018/3.015 ms
vint@ha ~ $ ssh vagrant@192.168.150.93
vagrant@192.168.150.93's password:
Last login: Tue Apr 24 15:06:07 2018 from 192.168.1.223
Welcome to your Vagrant-built virtual machine.
[vagrant@centos7 ~]$ su
Пароль:
[root@centos7 vagrant]# yum install wget gcc ncurses bison flex
Загружены модули: fastestmirror
Could not retrieve mirrorlist http://mirrorlist.centos.org/?release=7&arch=x86_64&repo=os&infra=stock error was
14: curl#7 - "Failed to connect to 2607:f8f8:700:12::10: Сеть недоступна"
int main()
{
    printf("hello, world!");
    return 0;
}

One of the configured repositories failed (Неизвестно),
and yum doesn't have enough cached data to continue. At this point the only
safe thing yum can do is fail. There are a few ways to work "fix" this:
1. Contact the upstream for the repository and get them to fix the problem.
2. Reconfigure the baseurl/etc. for the repository, to point to a working
upstream. This is most often useful if you are using a newer
distribution release than is supported by the repository (and the
packages for the previous distribution release still work).
3. Disable the repository, so yum won't use it by default. Yum will then
just ignore the repository until you permanently enable it again or use
--enablerepo for temporary usage:
    yum-config-manager --disable <repoid>
4. Configure the failing repository to be skipped, if it is unavailable.
Note that yum will try to contact the repo. when it runs most commands,
so will have to try and fail each time (and thus, yum will be much
slower). If it is a very temporary problem though, this is often a nice
compromise:
```

vagrant@centos7:/home/vagrant

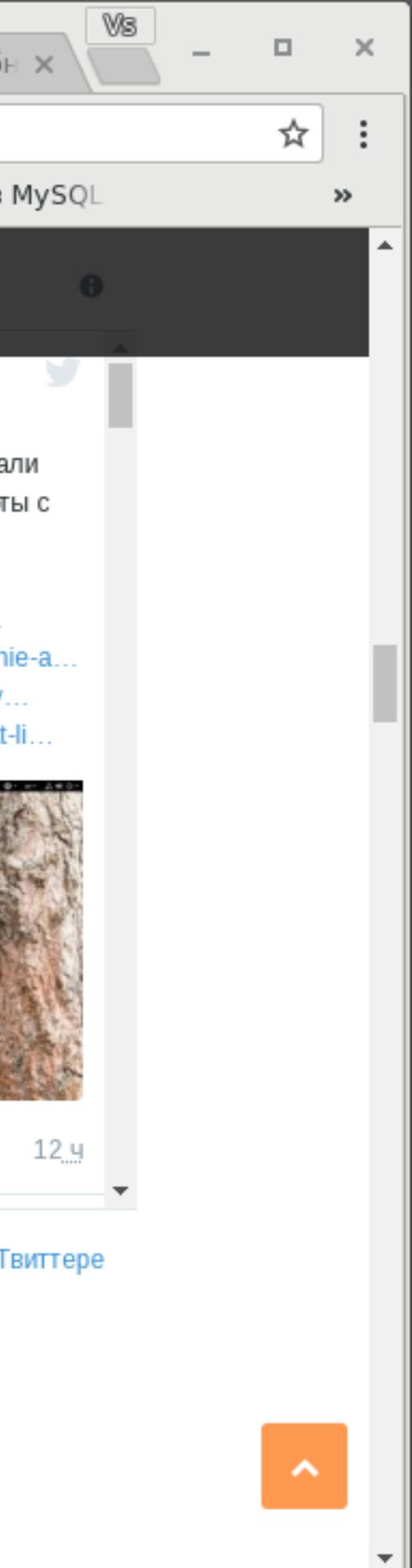
root@bil:/home/vint



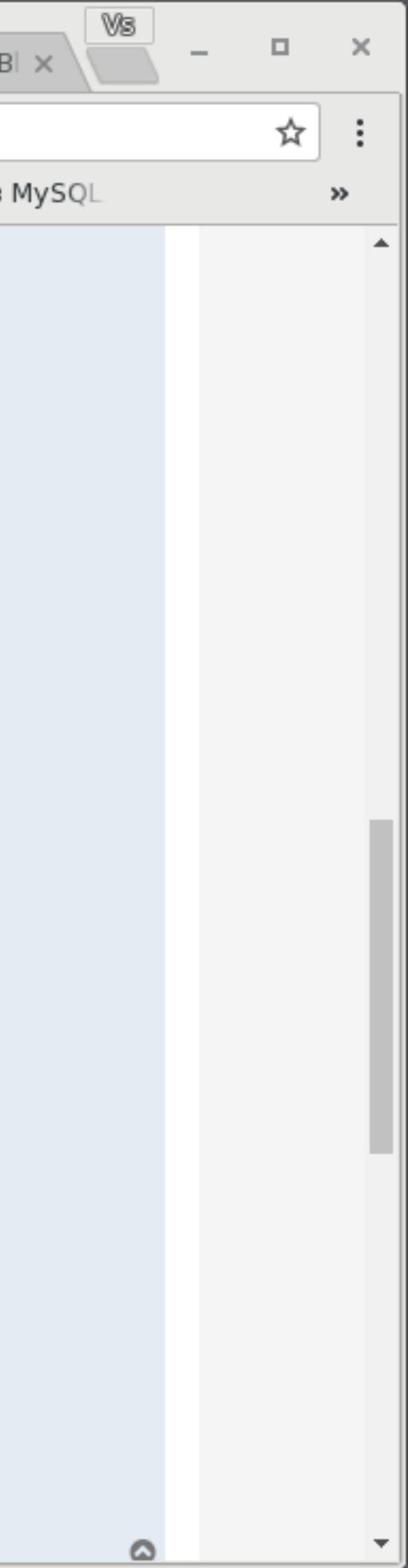
```
64 bytes from 8.8.8.8: icmp_seq=1 ttl=55 time=73.4 ms
^C
--- 8.8.8.8 ping statistics ---
1 packets transmitted, 1 received, 0% packet loss, time 0ms
rtt min/avg/max/mdev = 73.447/73.447/73.447/0.000 ms
[root@centos7 vagrant]# yum install wget gcc ncurses bison flex
Загружены модули: fastestmirror
base
extras
updates
(1/4): base/7/x86_64/group_gz #include <stdio.h>
(2/4): extras/7/x86_64/primary_db
(3/4): base/7/x86_64/primary_db
(4/4): updates/7/x86_64/primary_db
Determining fastest mirrors
* base: mirror.corbina.net
* extras: mirror.corbina.net
* updates: mirror.corbina.net
Разрешение зависимостей
--> Проверка сценария
--> Пакет bison.x86_64 0:3.0.4-1.el7 помечен для установки
--> Обработка зависимостей: m4 >= 1.4 пакета: bison-3.0.4-1.el7.x86_64
--> Пакет flex.x86_64 0:2.5.37-3.el7 помечен для установки
--> Пакет gcc.x86_64 0:4.8.3-9.el7 помечен для обновления
--> Обработка зависимостей: gcc = 4.8.3-9.el7 пакета: gcc-c++-4.8.3-9.el7.x86_64
--> Пакет gcc.x86_64 0:4.8.5-16.el7_4.2 помечен как обновление
--> Обработка зависимостей: libomp = 4.8.5-16.el7_4.2 пакета: gcc-4.8.5-16.el7_4.2.x86_64
--> Обработка зависимостей: cpp = 4.8.5-16.el7_4.2 пакета: gcc-4.8.5-16.el7_4.2.x86_64
--> Обработка зависимостей: libgcc >= 4.8.5-16.el7_4.2 пакета: gcc-4.8.5-16.el7_4.2.x86_64
--> Пакет ncurses.x86_64 0:5.9-13.20130511.el7 помечен для обновления
--> Пакет ncurses.x86_64 0:5.9-14.20130511.el7_4 помечен как обновление
--> Обработка зависимостей: ncurses-libs(x86-64) = 5.9-14.20130511.el7_4 пакета: ncurses-5.9-14.20130511.el7_4.x86_64
--> Пакет wget.x86_64 0:1.14-10.el7_0.1 помечен для обновления
--> Пакет wget.x86_64 0:1.14-15.el7_4.1 помечен как обновление
--> Проверка сценария
--> Пакет cpp.x86_64 0:4.8.3-9.el7 помечен для обновления
--> Пакет cpp.x86_64 0:4.8.5-16.el7_4.2 помечен как обновление
--> Пакет gcc-c++.x86_64 0:4.8.3-9.el7 помечен для обновления
--> Пакет gcc-c++.x86_64 0:4.8.5-16.el7_4.2 помечен как обновление
--> Обработка зависимостей: libstdc++-devel = 4.8.5-16.el7_4.2 пакета: gcc-c++-4.8.5-16.el7_4.2.x86_64
--> Обработка зависимостей: libstdc++ = 4.8.5-16.el7_4.2 пакета: gcc-c++-4.8.5-16.el7_4.2.x86_64
--> Пакет libgcc.x86_64 0:4.8.3-9.el7 помечен для обновления
--> Пакет libgcc.x86_64 0:4.8.5-16.el7_4.2 помечен как обновление
--> Пакет libomp.x86_64 0:4.8.3-9.el7 помечен для обновления
--> Пакет libomp.x86_64 0:4.8.5-16.el7_4.2 помечен как обновление
--> Пакет m4.x86_64 0:1.4.16-10.el7 помечен для установки
--> Пакет ncurses-libs.x86_64 0:5.9-13.20130511.el7 помечен для обновления
```

vagrant@centos7:/home/vagrant

root@bil:/home/vint



```
*  
* Virtualization  
*  
Virtualization (VIRTUALIZATION) [Y/n/?] y  
  Kernel-based Virtual Machine (KVM) support (KVM) [M/n/y/?] m  
    KVM for Intel processors support (KVM_INTEL) [M/n/?] m  
    KVM for AMD processors support (KVM_AMD) [M/n/?] m  
    Audit KVM MMU (KVM_MMU_AUDIT) [Y/n/?] y  
  Host kernel accelerator for virtio net (VHOST_NET) [M/n/?] m  
  VHOST_SCSI TCM fabric driver (VHOST_SCSI) [N/m/?] n  
  vhost virtio-vsock driver (VHOST_VSOCK) [N/m/?] (NEW)  
  Cross-endian support for vhost (VHOST_CROSS_ENDIAN_LEGACY) [N/y/?] (NEW)  
*  
* Library routines  
*  
CRC-CCITT functions (CRC_CCITT) [Y/?] y  
CRC16 functions (CRC16) [Y/m/?] y  
CRC calculation for the T10 Data Integrity Field (CRC_T10DIF) [Y/?] y  
CRC ITU-T V.41 functions (CRC_ITU_T) [M/y/?] m  
CRC32/CRC32c functions (CRC32) [Y/?] y  
  CRC32 perform self test on init (CRC32_SELFTEST) [N/m/y/?] n  
  CRC32 implementation  
    1. Slice by 8 bytes (CRC32_SLICEBY8)  
    2. Slice by 4 bytes (CRC32_SLICEBY4)  
    3. Sarwate's Algorithm (one byte at a time) (CRC32_SARWATE)  
    4. Classic Algorithm (one bit at a time) (CRC32_BIT)  
  choice[1-4?]: 1  
CRC4 functions (CRC4) [N/m/y/?] (NEW)  
CRC7 functions (CRC7) [N/m/y/?] n  
CRC32c (Castagnoli, et al) Cyclic Redundancy-Check (LIBCRC32C) [M/y/?] m  
CRC8 function (CRC8) [M/n/y/?] m  
PRNG perform self test on init (RANDOM32_SELFTEST) [N/y/?] n  
XZ decompression support (XZ_DEC) [Y/?] y  
XZ decompressor tester (XZ_DEC_TEST) [N/m/y/?] n  
glob self-test on init (GLOB_SELFTEST) [N/m/y/?] (NEW)  
CORDIC algorithm (CORDIC) [M/y/?] m  
JEDEC DDR data (DDR) [N/y/?] n  
IRQ polling library (IRQ_POLL) [Y/?] (NEW) y  
Select compiled-in fonts (FONTS) [N/y/?] n  
parman (PARMAN) [N/m/y] (NEW)  
Test string functions (STRING_SELFTEST) [N/y] (NEW)  
#  
# configuration written to .config  
#  
Makefile:954: *** "Cannot generate ORC metadata for CONFIG_UNWINDER_ORC=y, please install libelf-dev, libelf-devel or elfutils-libelf-devel".  
Останов.  
[root@centos7 linux-4.14.36]# yum install libelf-dev libelf-devel elfutils-libelf-devel
```



```
make[2]: *** [prepare0] Error 2
make[1]: *** [binrpm-pkg] Error 2
make: *** [binrpm-pkg] Ошибка 2
[root@centos7 linux-4.14.36]# yum bc
Загружены модули: fastestmirror
Не найдена команда: bc Пожалуйста, воспользуйтесь /usr/bin/yum --help
[root@centos7 linux-4.14.36]# yum install bc
Загружены модули: fastestmirror
Loading mirror speeds from cached hostfile
* base: mirror.corbina.net
* elrepo: ord.mirror.rackspace.com
* extras: mirror.corbina.net
* updates: mirror.corbina.net
Разрешение зависимостей
--> Проверка сценария
---> Пакет bc.x86_64 0:1.06.95-13.el7 помечен для установки
--> Проверка зависимостей окончена

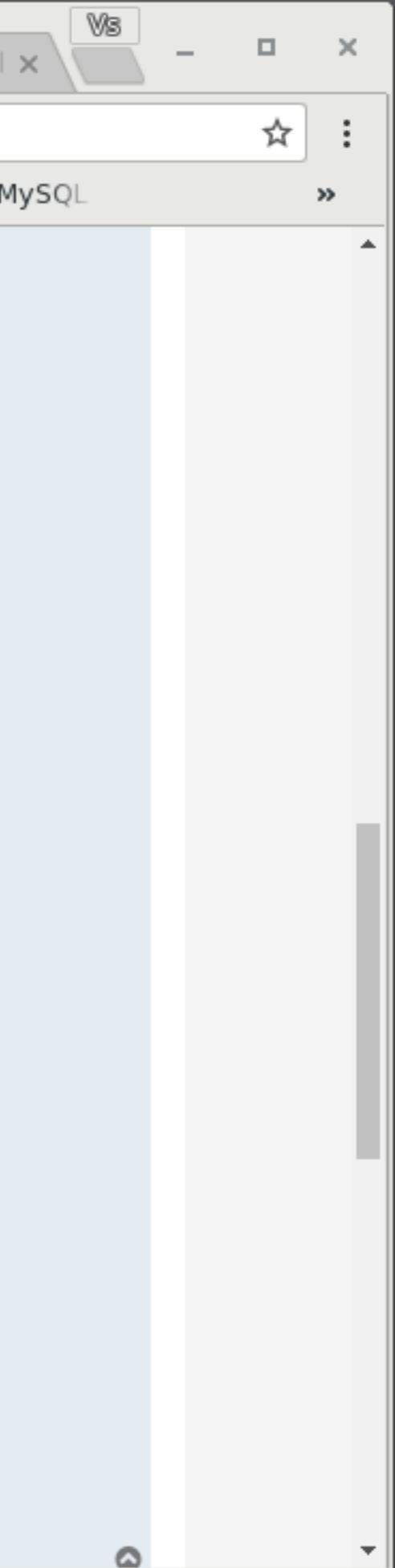
Зависимости определены
int main()
=====
Package           Архитектура      Версия          Репозиторий      Размер
=====
Установка:
bc               x86_64           1.06.95-13.el7  base            115 k

Итого за операцию
=====
Установить 1 пакет

Объем загрузки: 115 k
Объем изменений: 215 k
Is this ok [y/d/N]: y
Downloading packages:
bc-1.06.95-13.el7.x86_64.rpm | 115 kB  00:00:01
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Установка   : bc-1.06.95-13.el7.x86_64          1/1
  Проверка   : bc-1.06.95-13.el7.x86_64          1/1

Установлено:
  bc.x86_64 0:1.06.95-13.el7

Выполнено!
[root@centos7 linux-4.14.36]#
```



```

* extras: mirror.corbina.net
* updates: mirror.corbina.net
Разрешение зависимостей
--> Проверка сценария
--> Пакет grub2.x86_64 1:2.02-0.65.el7.centos.2 помечен для установки
--> Обработка зависимостей: grub2-pc = 1:2.02-0.65.el7.centos.2 пакет: 1:grub2-2.02-0.65.el7.centos.2.x86_64
--> Проверка сценария
--> Пакет grub2-pc.x86_64 1:2.02-0.65.el7.centos.2 помечен для установки
--> Обработка зависимостей: grub2-tools-minimal = 1:2.02-0.65.el7.centos.2 пакета: 1:grub2-pc-2.02-0.65.el7.centos.2.x86_64
--> Обработка зависимостей: grub2-tools-extra = 1:2.02-0.65.el7.centos.2 пакета: 1:grub2-pc-2.02-0.65.el7.centos.2.x86_64
--> Обработка зависимостей: grub2-tools = 1:2.02-0.65.el7.centos.2 пакета: 1:grub2-pc-2.02-0.65.el7.centos.2.x86_64
--> Обработка зависимостей: grub2-pc-modules = 1:2.02-0.65.el7.centos.2 пакета: 1:grub2-pc-2.02-0.65.el7.centos.2.x86_64
--> Обработка зависимостей: grub2-common = 1:2.02-0.65.el7.centos.2 пакета: 1:grub2-pc-2.02-0.65.el7.centos.2.x86_64
--> Проверка сценария
--> Пакет grub2-common.noarch 1:2.02-0.65.el7.centos.2 помечен для установки
--> Пакет grub2-pc-modules.noarch 1:2.02-0.65.el7.centos.2 помечен для установки
--> Пакет grub2-tools.x86_64 1:2.02-0.65.el7.centos.2 помечен для установки
--> Пакет grub2-tools-extra.x86_64 1:2.02-0.65.el7.centos.2 помечен для установки
--> Обработка зависимостей: libfreetype.so.6()(64bit) пакета: 1:grub2-tools-extra-2.02-0.65.el7.centos.2.x86_64
--> Пакет grub2-tools-minimal.x86_64 1:2.02-0.65.el7.centos.2 помечен для установки
--> Проверка сценария
--> Пакет freetype.x86_64 0:2.4.11-15.el7 помечен для установки
--> Проверка зависимостей окончена

printf("hello, world!");

Зависимости определены

=====
Package          Архитектура      Версия          Репозиторий      Размер
=====
Установка:
grub2           x86_64           1:2.02-0.65.el7.centos.2      updates          29 k
Установка зависимостей:
freetype         x86_64           2.4.11-15.el7          base            392 k
grub2-common    noarch           1:2.02-0.65.el7.centos.2      updates          726 k
grub2-pc         x86_64           1:2.02-0.65.el7.centos.2      updates          29 k
grub2-pc-modules noarch           1:2.02-0.65.el7.centos.2      updates          845 k
grub2-tools      x86_64           1:2.02-0.65.el7.centos.2      updates          1.8 M
grub2-tools-extra x86_64           1:2.02-0.65.el7.centos.2      updates          993 k
grub2-tools-minimal x86_64           1:2.02-0.65.el7.centos.2      updates          170 k

Итого за операцию
=====
Установить 1 пакет (+7 зависимых)

Объем загрузки: 4.9 M
Объем изменений: 23 M
Is this ok [y/d/N]: y

```

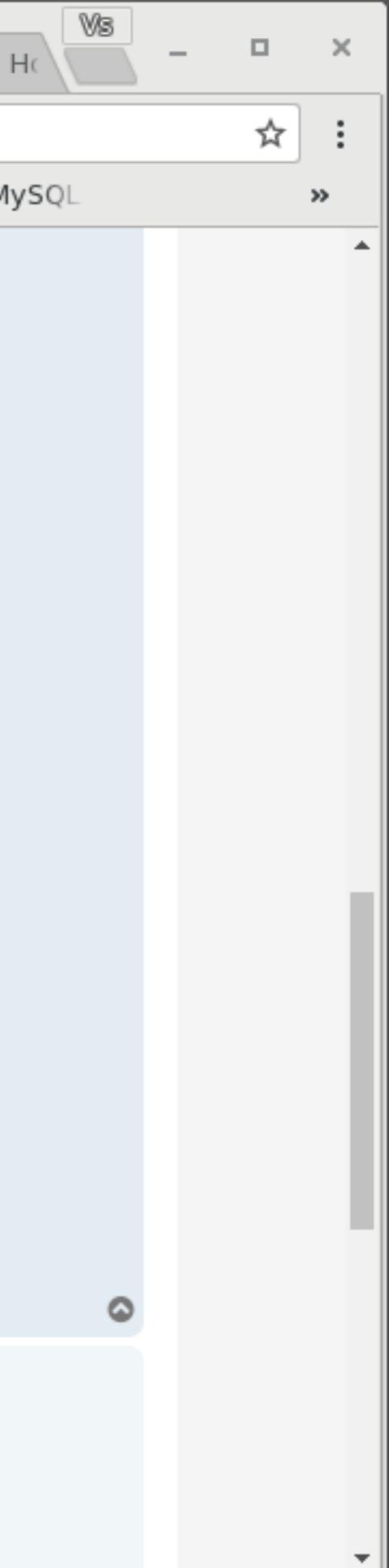
vagrant@centos7:/usr/src/linux-4.14.36

root@developer:/home/vint

vint@ha:~

vint@ha:/mnt/repo/Developer/Edu/Otus/git

root@ha:/home/vint



```
search --no-floppy --fs-uuid --set=root --hint-bios=hd0,msdos1 --hint-efi=hd0,msdos1 --hint-baremetal=ahci0,msdos1 --hint='hd0,msdos
1' e71c1791-fe3d-4db9-9763-6cfe9478212f
else
    search --no-floppy --fs-uuid --set=root e71c1791-fe3d-4db9-9763-6cfe9478212f
fi
linux16 /vmlinuz-4.16.4-1.el7.elrepo.x86_64 root=/dev/mapper/centos-root ro rd.lvm.lv=centos/root rd.lvm.lv=centos/swap crashkernel=auto rhgb quiet systemd.log_level=debug systemd.log_target=kmsg
    initrd16 /initramfs-4.16.4-1.el7.elrepo.x86_64.img
}
menuentry 'CentOS Linux (3.16.56) 7 (Core)' --class rhel fedora --class gnu-linux --class gnu --class os --unrestricted $menuentry_id_option 'gnulinux-3.16.56-advanced-6c3124fe-d329-4790-91b8-3cea970edc32' {
    load_video
    insmod gzio
    insmod part_msdos
    insmod xfs
    set root='hd0,msdos1'
    if [ $feature_platform_search_hint = xy ]; then
        search --no-floppy --fs-uuid --set=root --hint-bios=hd0,msdos1 --hint-efi=hd0,msdos1 --hint-baremetal=ahci0,msdos1 --hint='hd0,msdos
1' e71c1791-fe3d-4db9-9763-6cfe9478212f
    else
        search --no-floppy --fs-uuid --set=root e71c1791-fe3d-4db9-9763-6cfe9478212f
    fi
    linux16 /vmlinuz-3.16.56 root=/dev/mapper/centos-root ro rd.lvm.lv=centos/root rd.lvm.lv=centos/swap crashkernel=auto rhgb quiet
    initrd16 /initramfs-3.16.56.img
}
menuentry 'CentOS Linux (3.16.56) 7 (Core) with debugging' --class rhel fedora --class gnu-linux --class gnu --class os --unrestricted $menuentry_id_option 'gnulinux-3.16.56-advanced-6c3124fe-d329-4790-91b8-3cea970edc32' {
    load_video
    insmod gzio
    insmod part_msdos
    insmod xfs
    set root='hd0,msdos1'
    if [ $feature_platform_search_hint = xy ]; then
        search --no-floppy --fs-uuid --set=root --hint-bios=hd0,msdos1 --hint-efi=hd0,msdos1 --hint-baremetal=ahci0,msdos1 --hint='hd0,msdos
1' e71c1791-fe3d-4db9-9763-6cfe9478212f
    else
        search --no-floppy --fs-uuid --set=root e71c1791-fe3d-4db9-9763-6cfe9478212f
    fi
    linux16 /vmlinuz-3.16.56 root=/dev/mapper/centos-root ro rd.lvm.lv=centos/root rd.lvm.lv=centos/swap crashkernel=auto rhgb quiet  systemd.log_level=debug systemd.log_target=kmsg
    initrd16 /initramfs-3.16.56.img
}
menuentry 'CentOS Linux (3.16.56.old) 7 (Core)' --class rhel fedora --class gnu-linux --class gnu --class os --unrestricted $menuentry_id_option 'gnulinux-3.16.56.old-advanced-6c3124fe-d329-4790-91b8-3cea970edc32' {
    load_video
    insmod gzio

```



root@cei: /install/OS/vagrant root@developer:/install/OS/vagrant vint@ha:/mnt/repo/Developer/Edu/ root@ha:/ho vint@ra: root@raz:/home/ftp/us

```
rpm      rpm2cpio  rpmdb    rpmkeys  rpmquery  rpmverify
[root@centos7 linux-4.14.36]# yum search rpm
Загружены модули: fastestmirror
Loading mirror speeds from cached hostfile
* base: mirror.corbina.net
* elrepo: ftp.e-utp.net
* extras: mirror.corbina.net
* updates: mirror.corbina.net
=====
N/S matched: rpm =====
deltarpm.x86_64 : Create deltas between rpms
drpmSync.x86_64 : Sync a file tree with deltarpms
pcp-pmda-rpm.x86_64 : Performance Co-Pilot (PCP) metrics for the RPM package manager
perl-srpm-macros.noarch : RPM macros for building Perl source package from source repository
python-deltarpm.x86_64 : Python bindings for deltarpm
qt5-rpm-macros.noarch : RPM macros for Qt5
redhat-rpm-config.noarch : CentOS specific rpm configuration files
rpm.x86_64 : The RPM package management system
rpm-apidocs.noarch : API documentation for RPM libraries
rpm-build-libs.x86_64 : Libraries for building and signing RPM packages
rpm-build-libs.i686 : Libraries for building and signing RPM packages
rpm-devel.i686 : Development files for manipulating RPM packages
rpm-devel.x86_64 : Development files for manipulating RPM packages
rpm-libs.x86_64 : Libraries for manipulating RPM packages
rpm-libs.i686 : Libraries for manipulating RPM packages
rpm-plugin-systemd-inhibit.x86_64 : Rpm plugin for systemd inhibit functionality
rpm-python.x86_64 : Python bindings for apps which will manipulate RPM packages
rpmdevtools.noarch : RPM Development Tools
rpmlint.noarch : Tool for checking common errors in RPM packages
yum-plugin-rpm-warm-cache.noarch : Yum plugin to access the rpmdb files early to warm up access to the db
deltaiso.x86_64 : Create deltas betweenisos containing rpms
firewalld-filesystem.noarch : Firewalld directory layout and rpm macros
getinfo.noarch : Packaged 'getinfo.sh' script for RPM based distros
koji-builder.noarch : Koji RPM builder daemon
perl-macros.x86_64 : Macros for rpmbuild
rpm-build.x86_64 : Scripts and executable programs used to build packages
rpm-cron.noarch : Create daily logs of installed packages.
rpm-sign.x86_64 : Package signing support
scl-utils-build.x86_64 : RPM build macros for alternative packaging
sip-macros.x86_64 : RPM macros for use when working with SIP
yum.noarch : RPM package installer/updater/manager
```

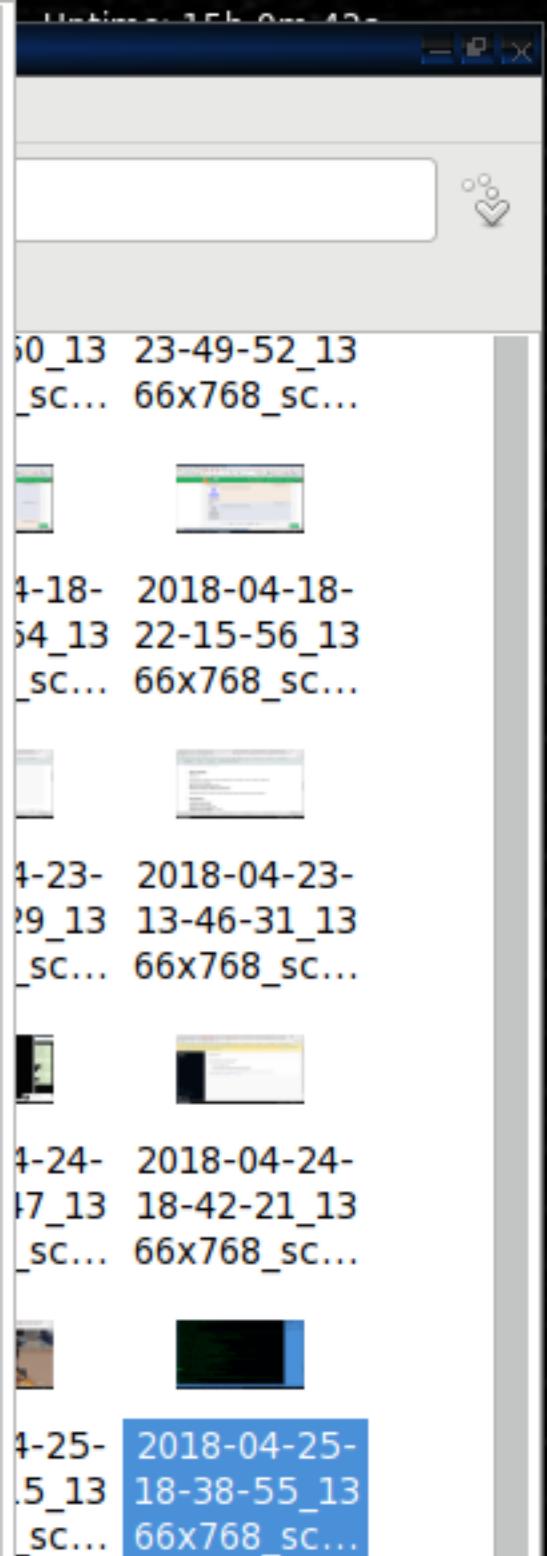
Показаны только совпадения по названиям и описаниям, для большего используйте «search all».

```
[root@centos7 linux-4.14.36]# yum install redhat-rpm-config rpm-build-libs rpm-devel rpm-libs rpm-plugin-systemd-inhibit rpmdevtools rpmlint rpm-build rpm-cron rpm-sign
Загружены модули: fastestmirror
Loading mirror speeds from cached hostfile
```



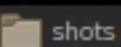
root@centos7:/usr/src/kernels/lin root@developer:/install/OS/vagra root@developer:/install/OS/vagra vint@ha:/mnt/repo/Developer/Edt root@ha:/t root@bil:/t vint@

```
[root@centos7 ~]# uname -rs
Linux 3.16.56
[root@centos7 ~]# ls -la /boot/
Итого 242688
dr-xr-xr-x 5 root root 4096 апр 25 17:41 .
dr-xr-xr-x 18 root root 4096 апр 25 05:25 ..
-rw-r--r-- 1 root root 123838 мар 6 2015 config-3.10.0-229.el7.x86_64
-rw-r--r-- 1 root root 191206 апр 24 19:25 config-4.16.4-1.el7.elrepo.x86_64
drwxr-xr-x 3 root root 16 апр 25 07:50 efi
drwxr-xr-x 2 root root 26 июл 16 2015 grub
drwx----- 5 root root 91 апр 25 17:36 grub2
-rw-r--r-- 1 root root 39838589 июл 16 2015 initramfs-0-rescue-241163503ce842c489360d0a48a606fc.img
-rw-r--r-- 1 root root 17206544 июл 16 2015 initramfs-3.10.0-229.el7.x86_64.img
-rw-r--r-- 1 root root 17839871 июл 16 2015 initramfs-3.10.0-229.el7.x86_64kdump.img
-rw-r--r-- 1 root root 28882263 апр 25 17:38 initramfs-3.16.56.img
-rw-r--r-- 1 root root 33749299 апр 25 17:42 initramfs-3.16.56kdump.img
-rw----- 1 root root 18434748 апр 25 05:11 initramfs-4.16.4-1.el7.elrepo.x86_64.img
-rw-r--r-- 1 root root 17933101 апр 25 16:15 initramfs-4.16.4-1.el7.elrepo.x86_64kdump.img
-rw-r--r-- 1 root root 589711 июл 16 2015 initrd-plymouth.img
-rw-r--r-- 1 root root 240039 мар 6 2015 symvers-3.10.0-229.el7.x86_64.gz
-rw-r--r-- 1 root root 350411 апр 24 19:28 symvers-4.16.4-1.el7.elrepo.x86_64.gz
lrwxrwxrwx 1 root root 24 апр 25 17:29 System.map -> /boot/System.map-3.16.56
-rw----- 1 root root 2881257 мар 6 2015 System.map-3.10.0-229.el7.x86_64
-rw-r--r-- 1 root root 2997002 апр 25 17:29 System.map-3.16.56
-rw-r--r-- 1 root root 2997002 апр 25 17:17 System.map-3.16.56.old
-rw----- 1 root root 3580020 апр 24 19:25 System.map-4.16.4-1.el7.elrepo.x86_64
lrwxrwxrwx 1 root root 21 апр 25 17:29 vmlinuz -> /boot/vmlinuz-3.16.56
-rw-xr-xr-x 1 root root 5029136 июл 16 2015 vmlinuz-0-rescue-241163503ce842c489360d0a48a606fc
-rw-xr-xr-x 1 root root 5029136 мар 6 2015 vmlinuz-3.10.0-229.el7.x86_64
-rw-r--r-- 1 root root 166 мар 6 2015 .vmlinuz-3.10.0-229.el7.x86_64.hmac
-rw-r--r-- 1 root root 5225040 апр 25 17:29 vmlinuz-3.16.56
-rw-r--r-- 1 root root 5225040 апр 25 17:17 vmlinuz-3.16.56.old
-rw-xr-xr-x 1 root root 6825008 апр 24 19:25 vmlinuz-4.16.4-1.el7.elrepo.x86_64
[root@centos7 ~]# du -sh /usr/src/linux-3.16.56/
7.0G /usr/src/linux-3.16.56/
[root@centos7 ~]#
```



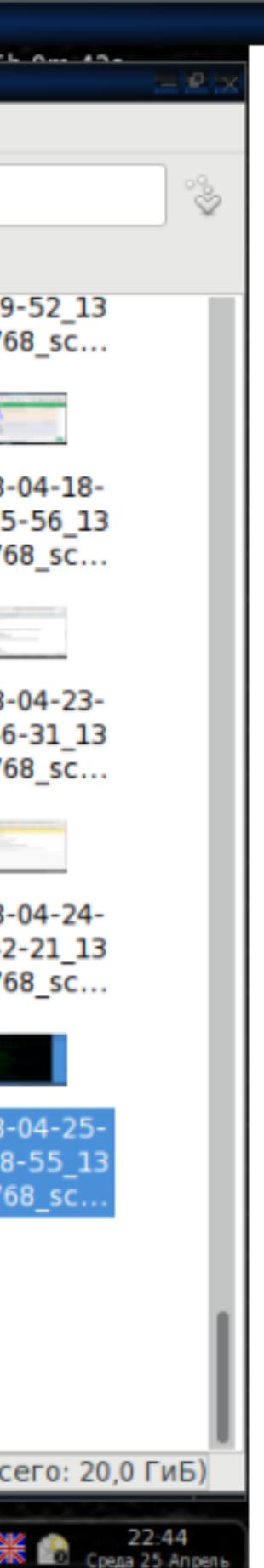
root@ce: root@developer:/install/OS/vagrant root@developer:/install/OS/vagrant vint@ha:/mnt/repo/Developer/Edu/ root@ha:/ho vint@ra: root@raz:/home/ftp/us

3,4 ГиБ (Всего: 20,0 ГиБ)



```
INSTALL /lib/firmware/emi62/loader-fw
INSTALL /lib/firmware/emi62/bitstream-fw
INSTALL /lib/firmware/emi62/spdif/fw
INSTALL /lib/firmware/emi62/midi/fw
INSTALL /lib/firmware/kaweth/new_code.bin
INSTALL /lib/firmware/kaweth/trigger_code.bin
INSTALL /lib/firmware/kaweth/new_code_fix.bin
INSTALL /lib/firmware/kaweth/trigger_code_fix.bin
INSTALL /lib/firmware/ti_3410/fw
INSTALL /lib/firmware/ti_5052/fw
INSTALL /lib/firmware/mts_cdma/fw
INSTALL /lib/firmware/mts_gsm/fw
INSTALL /lib/firmware/mts_edge/fw
INSTALL /lib/firmware/edgeport/boot/fw
INSTALL /lib/firmware/edgeport/boot2/fw
INSTALL /lib/firmware/edgeport/down/fw
INSTALL /lib/firmware/edgeport/down2/fw
INSTALL /lib/firmware/edgeport/down3.bin
INSTALL /lib/firmware/whiteheat_loader/fw
INSTALL /lib/firmware/whiteheat/fw
INSTALL /lib/firmware/keyspan_pda/keyspan_pda/fw
INSTALL /lib/firmware/keyspan_pda/xircom_pgs/fw
DEPMOD 3.16.56
[root@centos7 linux-3.16.56]# make -j3 install
sh ./arch/x86/boot/install.sh 3.16.56 arch/x86/boot/bzImage \
    System.map "/boot"
[root@centos7 linux-3.16.56]# ls -la /boot/
итого 177216
dr-xr-xr-x  5 root root  4096 апр 25 17:32 .
dr-xr-xr-x 18 root root  4096 апр 25 05:25 ..
-rw-r--r--  1 root root 123838 мар  6 2015 config-3.10.0-229.el7.x86_64
-rw-r--r--  1 root root 191206 апр 24 19:25 config-4.16.4-1.el7.elrepo.x86_64
drwxr-xr-x  3 root root   16 апр 25 07:50 efi
drwxr-xr-x  2 root root   26 июл 16 2015 grub
drwx-----  5 root root   91 апр 25 17:33 grub2
-rw-r--r--  1 root root 39838589 июл 16 2015 initramfs-0-rescue-241163503ce842c489360d0a48a606fc.img
-rw-r--r--  1 root root 17206544 июл 16 2015 initramfs-3.10.0-229.el7.x86_64.img
-rw-r--r--  1 root root 17839871 июл 16 2015 initramfs-3.10.0-229.el7.x86_64kdump.img
-rw-r--r--  1 root root 28882263 апр 25 17:33 initramfs-3.16.56.img
-rw-----  1 root root 18434748 апр 25 05:11 initramfs-4.16.4-1.el7.elrepo.x86_64.img
-rw-r--r--  1 root root 17933101 апр 25 16:15 initramfs-4.16.4-1.el7.elrepo.x86_64kdump.img
-rw-r--r--  1 root root 589711 июл 16 2015 initrd-plymouth.img
-rw-r--r--  1 root root 240039 мар  6 2015 symvers-3.10.0-229.el7.x86_64.gz
-rw-r--r--  1 root root 350411 апр 24 19:28 symvers-4.16.4-1.el7.elrepo.x86_64.gz
lrwxrwxrwx  1 root root   24 апр 25 17:29 System.map -> /boot/System.map-3.16.56
-rw-----  1 root root 2881257 мар  6 2015 System.map-3.10.0-229.el7.x86_64
-rw-r--r--  1 root root 2997002 апр 25 17:29 System.map-3.16.56
```

root@developer:/install/OS/v root@developer:/install/OS/v vint@ha:/mnt/repo/Developer root@root@raz:/home vint@ha:/mnt/repo/Developer/Edu/Otus/OS/Linux/



```
Jul 16 08:45:54 Installed: pciutils-3.2.1-4.el7.x86_64
Jul 16 08:45:54 Installed: 1:factor-2.4.4-1.el7.x86_64
Jul 16 08:45:54 Installed: augeas-libs-1.1.0-17.el7.x86_64
Jul 16 08:45:54 Installed: ruby-augeas-0.5.0-1.el7.x86_64
Jul 16 08:45:54 Installed: libselinux-ruby-2.2.2-6.el7.x86_64
Jul 16 08:45:55 Installed: puppet-3.8.1-1.el7.noarch
Jul 16 08:47:01 Erased: 1:grub2-2.02-0.16.el7.centos.x86_64
Jul 16 08:47:01 Erased: 1:grub2-tools-2.02-0.16.el7.centos.x86_64
Jul 16 08:47:01 Erased: freetype-2.4.11-9.el7.x86_64
Apr 25 03:32:37 Updated: libgcc-4.8.5-16.el7_4.2.x86_64
Apr 25 03:32:37 Updated: libstdc++-4.8.5-16.el7_4.2.x86_64
Apr 25 03:32:37 Installed: m4-1.4.16-10.el7.x86_64
Apr 25 03:32:37 Updated: libstdc++-devel-4.8.5-16.el7_4.2.x86_64
Apr 25 03:32:37 Updated: ncurses-base-5.9-14.20130511.el7_4.noarch
Apr 25 03:32:38 Updated: ncurses-libs-5.9-14.20130511.el7_4.x86_64
Apr 25 03:32:38 Updated: libgomp-4.8.5-16.el7_4.2.x86_64
Apr 25 03:32:38 Updated: cpp-4.8.5-16.el7_4.2.x86_64
Apr 25 03:32:40 Updated: gcc-4.8.5-16.el7_4.2.x86_64
Apr 25 03:32:41 Updated: gcc-c++-4.8.5-16.el7_4.2.x86_64
Apr 25 03:32:42 Updated: ncurses-devel-5.9-14.20130511.el7_4.x86_64
Apr 25 03:32:42 Updated: ncurses-5.9-14.20130511.el7_4.x86_64
Apr 25 03:32:42 Installed: bison-3.0.4-1.el7.x86_64
Apr 25 03:32:42 Installed: flex-2.5.37-3.el7.x86_64
Apr 25 03:32:42 Updated: wget-1.14-15.el7_4.1.x86_64
Apr 25 05:10:51 Installed: kernel-ml-4.16.4-1.el7.elrepo.x86_64
Apr 25 05:26:48 Updated: 2:vim-common-7.4.160-2.el7.x86_64
Apr 25 05:26:48 Updated: 2:vim-enhanced-7.4.160-2.el7.x86_64
Apr 25 05:37:55 Updated: elfutils-libelf-0.168-8.el7.x86_64
Apr 25 05:37:55 Installed: elfutils-default-gama-scope-0.168-8.el7.noarch
Apr 25 05:37:55 Updated: elfutils-libs-0.168-8.el7.x86_64
Apr 25 05:37:55 Installed: elfutils-libelf-devel-0.168-8.el7.x86_64
Apr 25 05:39:16 Installed: bc-1.06.95-13.el7.x86_64
Apr 25 07:50:28 Installed: 1:grub2-common-2.02-0.65.el7.centos.2.noarch
Apr 25 07:50:28 Installed: 1:grub2-tools-minimal-2.02-0.65.el7.centos.2.x86_64
Apr 25 07:50:29 Installed: 1:grub2-tools-2.02-0.65.el7.centos.2.x86_64
Apr 25 07:50:29 Installed: 1:grub2-pc-modules-2.02-0.65.el7.centos.2.noarch
Apr 25 07:50:29 Installed: freetype-2.4.11-15.el7.x86_64
Apr 25 07:50:29 Installed: 1:grub2-tools-extra-2.02-0.65.el7.centos.2.x86_64
Apr 25 07:50:29 Installed: 1:grub2-pc-2.02-0.65.el7.centos.2.x86_64
Apr 25 07:50:29 Installed: 1:grub2-2.02-0.65.el7.centos.2.x86_64
Apr 25 13:36:27 Installed: perl-Thread-Queue-3.02-2.el7.noarch
Apr 25 13:36:28 Installed: perl-Test-Harness-3.28-3.el7.noarch
Apr 25 13:36:28 Installed: perl-Data-Dumper-2.145-3.el7.x86_64
Apr 25 13:36:28 Installed: autoconf-2.69-11.el7.noarch
Apr 25 13:36:29 Installed: automake-1.13.4-3.el7.noarch
Apr 25 13:36:29 Installed: libtool-2.4.2-22.el7_3.x86_64
Apr 25 13:39:18 Updated: rpm-libs-4.11.3-25.el7.x86_64
```

root@developer:/install/OS/v root@developer:/install/OS/v vint@ha:/mnt/repo/Developer root@root@raz:/home vint@ha:/mnt/repo/Developer/Edu/Otus/OS/Linux/

```
Apr 25 05:26:48 Updated: 2:vim-common-7.4.160-2.el7.x86_64
Apr 25 05:26:48 Updated: 2:vim-enhanced-7.4.160-2.el7.x86_64
Apr 25 05:37:55 Updated: elfutils-libelf-0.168-8.el7.x86_64
Apr 25 05:37:55 Installed: elfutils-default-yama-scope-0.168-8.el7.noarch
Apr 25 05:37:55 Updated: elfutils-libs-0.168-8.el7.x86_64
Apr 25 05:37:55 Installed: elfutils-libelf-devel-0.168-8.el7.x86_64
Apr 25 05:39:16 Installed: bc-1.06.95-13.el7.x86_64
Apr 25 07:50:28 Installed: 1:grub2-common-2.02-0.65.el7.centos.2.noarch
Apr 25 07:50:28 Installed: 1:grub2-tools-minimal-2.02-0.65.el7.centos.2.x86_64
Apr 25 07:50:29 Installed: 1:grub2-tools-2.02-0.65.el7.centos.2.x86_64
Apr 25 07:50:29 Installed: 1:grub2-pc-modules-2.02-0.65.el7.centos.2.noarch
Apr 25 07:50:29 Installed: freetype-2.4.11-15.el7.x86_64
Apr 25 07:50:29 Installed: 1:grub2-tools-extra-2.02-0.65.el7.centos.2.x86_64
Apr 25 07:50:29 Installed: 1:grub2-pc-2.02-0.65.el7.centos.2.x86_64
Apr 25 07:50:29 Installed: 1:grub2-2.02-0.65.el7.centos.2.x86_64
Apr 25 13:36:27 Installed: perl-Thread-Queue-3.02-2.el7.noarch
Apr 25 13:36:28 Installed: perl-Test-Harness-3.28-3.el7.noarch
Apr 25 13:36:28 Installed: perl-Data-Dumper-2.145-3.el7.x86_64
Apr 25 13:36:28 Installed: autoconf-2.69-11.el7.noarch
Apr 25 13:36:29 Installed: automake-1.13.4-3.el7.noarch
Apr 25 13:36:29 Installed: libtool-2.4.2-22.el7_3.x86_64
Apr 25 13:39:18 Updated: rpm-libs-4.11.3-25.el7.x86_64
Apr 25 13:39:19 Updated: rpm-4.11.3-25.el7.x86_64
Apr 25 13:39:19 Updated: rpm-build-libs-4.11.3-25.el7.x86_64
Apr 25 13:39:19 Updated: rpm-python-4.11.3-25.el7.x86_64
Apr 25 13:39:19 Installed: 1:emacs-filesystem-24.3-20.el7_4.noarch
Apr 25 13:39:20 Installed: desktop-file-utils-0.23-1.el7.x86_64
Apr 25 13:39:20 Installed: dwz-0.11-3.el7.x86_64
Apr 25 13:39:20 Installed: zip-3.0-11.el7.x86_64
Apr 25 13:39:20 Installed: patch-2.7.1-8.el7.x86_64
Apr 25 13:39:20 Installed: elfutils-0.168-8.el7.x86_64
Apr 25 13:39:21 Installed: gdb-7.6.1-100.el7_4.1.x86_64
Apr 25 13:39:21 Installed: perl-srpm-macros-1-8.el7.noarch
Apr 25 13:39:21 Installed: redhat-rpm-config-9.1.0-76.el7.centos.noarch
Apr 25 13:39:21 Installed: popt-devel-1.13-16.el7.x86_64
Apr 25 13:39:21 Installed: unzip-6.0-16.el7.x86_64
Apr 25 13:39:21 Installed: rpm-build-4.11.3-25.el7.x86_64
Apr 25 13:39:22 Installed: rpmdevtools-8.3-5.el7.noarch
Apr 25 13:39:22 Installed: rpm-devel-4.11.3-25.el7.x86_64
Apr 25 13:39:22 Installed: rpmlint-1.5-4.el7.noarch
Apr 25 13:39:22 Installed: rpm-sign-4.11.3-25.el7.x86_64
Apr 25 13:39:22 Installed: rpm-cron-4.11.3-25.el7.noarch
Apr 25 13:39:22 Installed: rpm-plugin-systemd-inhibit-4.11.3-25.el7.x86_64
Apr 25 13:54:17 Installed: perf-4.16.4-1.el7.elrepo.x86_64
Apr 25 13:54:17 Installed: python-perf-4.16.4-1.el7.elrepo.x86_64
Apr 25 14:16:04 Installed: 1:mc-4.8.7-11.el7.x86_64
[root@centos7 ~]#
```

ь (щелкнув кнопкой



root@developer:/install/OS/v root@developer:/install/OS/v vint@ha:/mnt/repo/Developer root@root@raz:/home vint@ha:/mnt/repo/Developer/Edu/Otus/OS/Linux/



23:15

Среда 25 Апрель