Создание локального зеркала репозитариев Linux
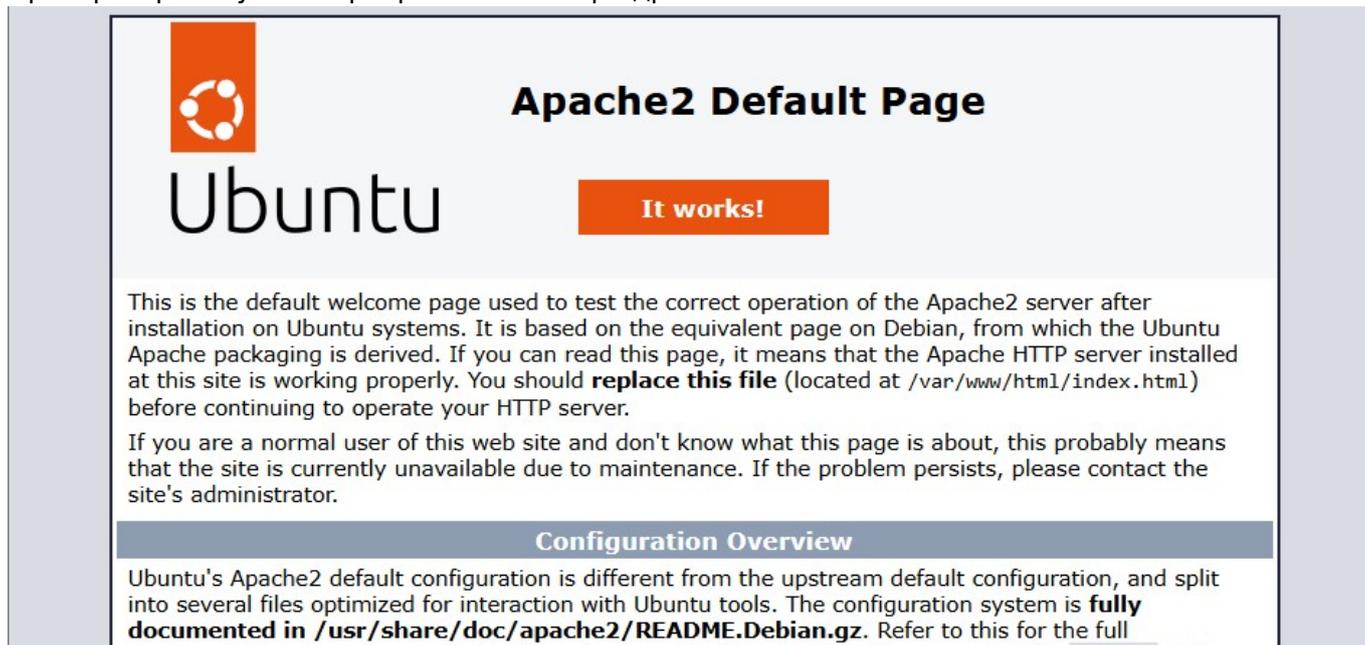
Предпологается что у вас установлено следующее ПО:

- Ubuntu server
- Apache HTTP Server
- PHP-модуль
- Настроен брандмауэр

Проверим работу веб сервера на нашем ip адресе

Если это не так... 1. Устанавливаем Apache

```
sudo apt install apache2
```

и PHP-модуль.

```
sudo apt update
```

```
sudo apt install php libapache2-mod-php
```

затем перезагрузите веб-сервер, чтобы перезапустить модуль PHP.

```
sudo service apache2 restart
```

Выполните проверку.

```
php -v
```

Переходим в папку www/html

```
cd /var/www/html
```

```
alisa@repo:~$ cd /var/www/html
alisa@repo:/var/www/html$
```

Смотрим что есть в директории

```
ls -n
```

```
alisa@repo:/var/www/html$ ls -n
total 12
-rw-r--r-- 1 0 0 10672 Mar  1 12:12 index.html
alisa@repo:/var/www/html$
```

удаляем файл index.html

```
sudo rm index.html
```

```
alisa@repo:/var/www/html$ sudo rm index.html
alisa@repo:/var/www/html$
```

проверяем выполнение команды удаления

```
ls -n
```

```
alisa@repo:/var/www/html$ ls -n
total 0
alisa@repo:/var/www/html$
```

Изменяем права папки html с root на alisa

```
sudo chown -R root:alisa /var/www/html
sudo chmod -R 571 /var/www/html
```

```
alisa@repo:/var/www/html$ sudo chown -R root:alisa /var/www/html
sudo chmod -R 571 /var/www/html
alisa@repo:/var/www/html$
```

Создаем необходимые на наше усмотрение папки

```
sudo mkdir /var/www/html
sudo mkdir /var/www/html/debian
sudo mkdir /var/www/html/gcc
sudo mkdir /var/www/html/git
sudo mkdir /var/www/html/gnu
sudo mkdir /var/www/html/kde
sudo mkdir /var/www/html/lfs
sudo mkdir /var/www/html/linux_kernel
sudo mkdir /var/www/html/mariadb
sudo mkdir /var/www/html/openstreetmap
sudo mkdir /var/www/html/raspbian
sudo mkdir /var/www/html/sourceware
sudo mkdir /var/www/html/ubuntu
sudo mkdir /var/www/html/ubuntu_kernel
sudo mkdir /var/www/html/unix
```

и вспомогательные папки для ключей и скриптов

```
sudo mkdir /home/alisa/repo
sudo mkdir /home/alisa/repo/keyring
sudo mkdir /home/alisa/repo/scripts
```

```
alisa@repo:/var/www/html$ sudo mkdir /home/alisa/repo
sudo mkdir /home/alisa/repo/keyring
sudo mkdir /home/alisa/repo/scripts
alisa@repo:/var/www/html$
```

Изменяем права папки html с root на alisa

```
sudo chown -R root:alisa /home/alisa/repo
sudo chmod -R 571 /home/alisa/repo
```

```
sudo apt-get update
```

Устанавливаем пакет debmirror

```
sudo apt install debmirror gnupg xz-utils
```

Открываем в редакторе файл /etc/apt/sources.list

```
sudo sensible-editor /etc/apt/sources.list
```

```
alisa@repo:/var/www/html$ sudo sensible-editor /etc/apt/sources.list
Select an editor.  To change later, run select-editor again.
  1. /bin/nano        <---- easiest
  2. /usr/bin/vim.basic
  3. /usr/bin/vim.tiny
  4. /bin/ed

Choose 1-4 [1]: 1
  GNU nano 8.3                          /etc/apt/sources.list
# Ubuntu sources have moved to /etc/apt/sources.list.d/ubuntu.sources




















                              [ Read 1 line ]
^G Help       ^O Write Out   ^F Where Is  ^K Cut      ^T Execute   ^C Location   M-U Undo
^X Exit       ^R Read File   ^\ Replace   ^U Paste    ^J Justify   ^/ Go To Line M-E Redo
```

записываем в файл следующие адреса

```
##############################################################
########## Ubuntu 22.04 LTS (Jammy Jellyfish)  #############
##############################################################
```
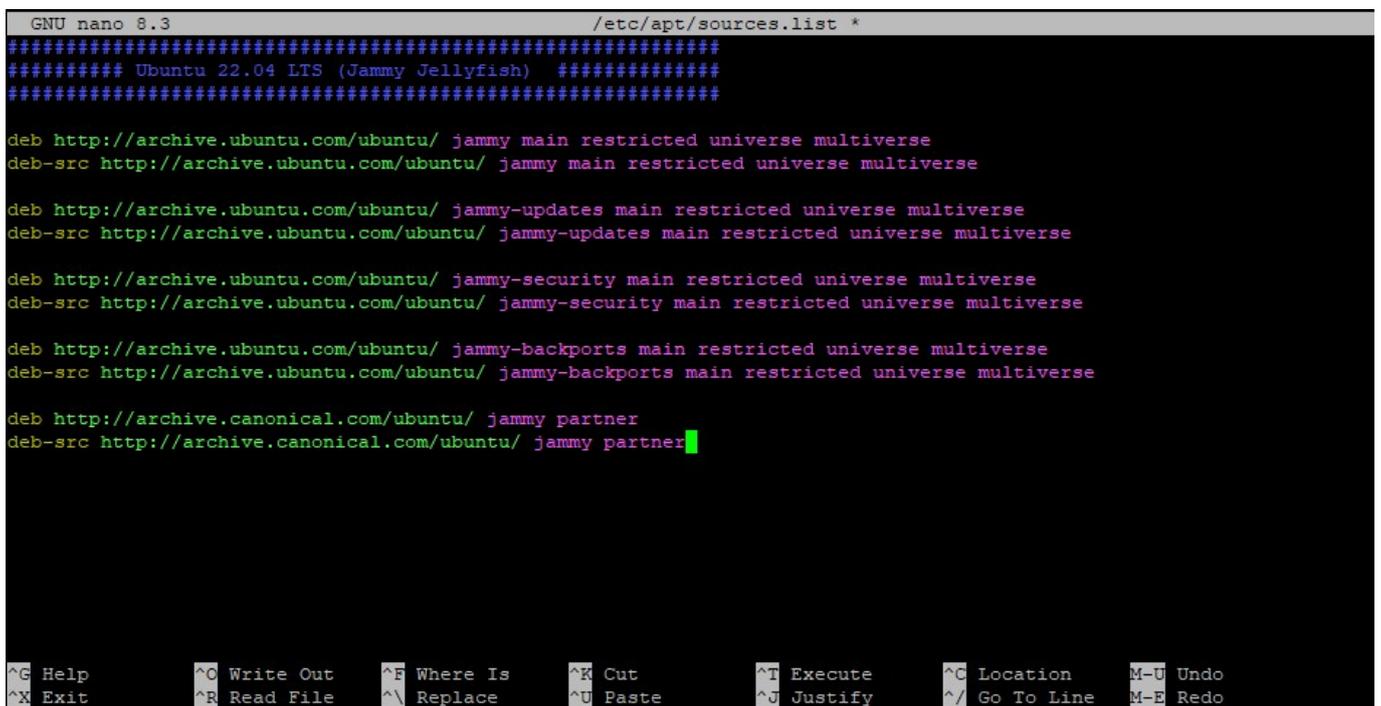
```
deb http://archive.ubuntu.com/ubuntu/ jammy main restricted universe
multiverse
deb-src http://archive.ubuntu.com/ubuntu/ jammy main restricted universe
multiverse

deb http://archive.ubuntu.com/ubuntu/ jammy-updates main restricted universe
multiverse
deb-src http://archive.ubuntu.com/ubuntu/ jammy-updates main restricted
universe multiverse

deb http://archive.ubuntu.com/ubuntu/ jammy-security main restricted
universe multiverse
deb-src http://archive.ubuntu.com/ubuntu/ jammy-security main restricted
universe multiverse

deb http://archive.ubuntu.com/ubuntu/ jammy-backports main restricted
universe multiverse
deb-src http://archive.ubuntu.com/ubuntu/ jammy-backports main restricted
universe multiverse

deb http://archive.canonical.com/ubuntu/ jammy partner
deb-src http://archive.canonical.com/ubuntu/ jammy partner
```


Записываем и сохраняем файл

```
sudo apt-get update
sudo apt-get dist-upgrade
```

Создадим файл скрипта зеркала Ubuntu

```
sudo sensible-editor /home/alisa/repo/scripts/mirror_ubuntu.sh
```

и вставим в скрипт следующий код

```
#!/bin/bash -x
/usr/bin/debmirror --source -m --passive --host=archive.ubuntu.com \
--root=ubuntu --method=http --progress \
--dist=focal,focal-security,focal-updates,focal-backports,jammy,jammy-
security,jammy-updates,jammy-backports,noble,noble-security,noble-
updates,noble-backports,oracular,oracular-security,oracular-
updates,oracular-backports \
--ignore-release-gpg --section=main,restricted,universe,multiverse \
--arch=amd64 /var/www/html/ubuntu/
```
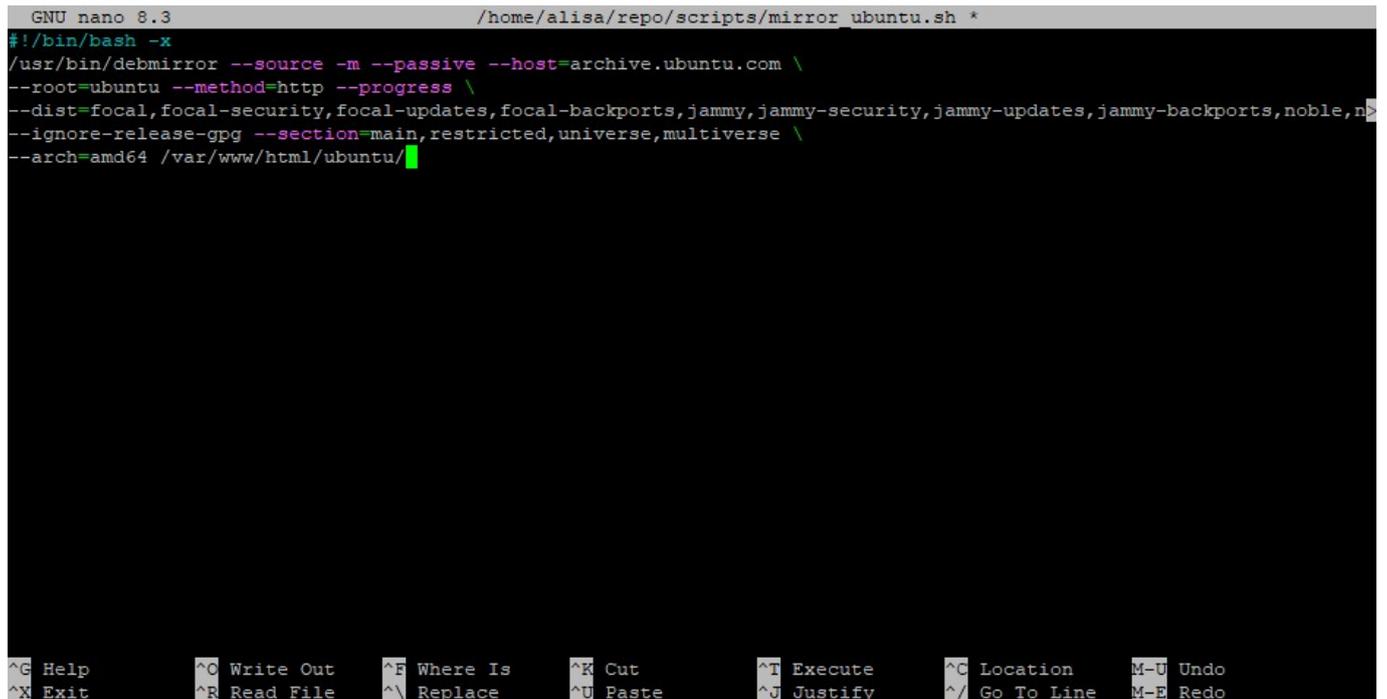
```
  GNU nano 8.3                        /home/alisa/repo/scripts/mirror_ubuntu.sh *
#!/bin/bash -x
/usr/bin/debmirror --source -m --passive --host=archive.ubuntu.com \
--root=ubuntu --method=http --progress \
--dist=focal,focal-security,focal-updates,focal-backports,jammy,jammy-security,jammy-updates,jammy-backports,noble,n▶
--ignore-release-gpg --section=main,restricted,universe,multiverse \
--arch=amd64 /var/www/html/ubuntu/█




^G Help       ^O Write Out   ^F Where Is    ^K Cut         ^T Execute     ^C Location    M-U Undo
^X Exit       ^R Read File   ^\ Replace     ^U Paste       ^J Justify     ^/ Go To Line  M-E Redo
```

перейдем в папку скрипта и сделаем его исполнительным

```
cd /home/alisa/repo/scripts/
sudo chmod +x mirror_ubuntu.sh
```

Установим для удобства пакет screen

```
sudo apt install screen
```

Запустим наш скрипт mirror_ubuntu.sh на исполнение

```
sudo screen /home/alisa/repo/scripts/mirror_ubuntu.sh
```

```
[GNUPG:] NO_PUBKEY 3B4FE6ACC0B21F32
[GNUPG:] NEWSIG
[GNUPG:] ERROR keydb_search 33554445
[GNUPG:] ERRSIG 871920D1991BC93C 1 10 01 1587663257 9 -
[GNUPG:] NO_PUBKEY 871920D1991BC93C
gpgv: unknown type of key resource 'trustedkeys.kbx'
gpgv: keyblock resource '/root/.gnupg/trustedkeys.kbx': General error
gpgv: Signature made Thu 23 Apr 2020 05:34:17 PM UTC
gpgv:               using RSA key 3B4FE6ACC0B21F32
gpgv: Can't check signature: No public key
gpgv: Signature made Thu 23 Apr 2020 05:34:17 PM UTC
gpgv:               using RSA key 871920D1991BC93C
gpgv: Can't check signature: No public key
.temp/.tmp/dists/focal/InRelease signature does not verify.
Ubuntu Release file: using Suite (focal).
[  0%] Getting: dists/focal-security/Release...        #** GET http://archive.ubuntu.com/ubuntu/dists/focal-securit
y/Release ==> 200 OK
ok
[  0%] Getting: dists/focal-security/InRelease...      #** GET http://archive.ubuntu.com/ubuntu/dists/focal-securit
y/InRelease ==> 200 OK
ok
[  0%] Getting: dists/focal-security/Release.gpg...    #** GET http://archive.ubuntu.com/ubuntu/dists/focal-securit
y/Release.gpg ==> 100%
```

Проверим в браузере работу скрипта по загрузке зеркала ubuntu

Создаём несколько папок в домашней диррректории, в которой будет храниться наш срез репозитория (или даже несколько), к примеру, согласно нижеприведенной схемы:

```
sudo mkdir /home/alisa/repo/kernelmirror
sudo mkdir /home/alisa/repo/kernelmirror/kernel
```

cd /var/www/html Настроим права доступа к нашей главной папке

sudo chown -R root:alisa /home/alisa/repo sudo chmod -R 571 /home/alisa/repo

sudo ln -s /home/alisa/repo/kernelmirror/kernel kernel

Скрипт mirrorkernel.sh Теперь создадим mirrorkernel.sh, открыв предпочитаемый вами редактор таким образом

Создайте файл «mirrorkernel.sh». Теперь создадим mirrorkernel.sh. Откройте предпочитаемый вами редактор таким образом sudo sensible-editor /home/alisa/repo/scripts/mirrorkernel.sh

зеркало lfs

rsync:*rsync2.osuosl.org/lfs/*
*rsync:*rsync2.osuosl.org/clfs/
rsync:*mirror.freedif.org/blfs/*

* *rsync -r –progress rsync:*rsync2.osuosl.org/lfs/ /var/www/html/lfs/

```
                 For more information about the OSL visit:
                      http://osuosl.org/services/hosting

         This host is the home to the primary archives of several
         projects.  We would prefer that only primary/secondary
                      mirrors use this service.  Thanks!

-----------------------------------------------------------------------


receiving incremental file list
skipping non-regular file "lfs-packages/11.0-rc2"
skipping non-regular file "lfs-packages/8.1"
skipping non-regular file "lfs-packages/8.1-rc2"
skipping non-regular file "lfs-packages/9.1"
skipping non-regular file "lfs-packages/lfs-packages-11.0-rc2.tar"
skipping non-regular file "lfs-packages/lfs-packages-11.2.tar"
skipping non-regular file "lfs-packages/lfs-packages-8.1-rc2.tar"
skipping non-regular file "lfs-packages/lfs-packages-8.1.tar"
skipping non-regular file "lfs-packages/lfs-packages-9.1.tar"
.timestamp
          13 100%   12.70kB/s    0:00:00 (xfr#1, ir-chk=1070/1072)
lfs-packages/
lfs-packages/MD5SUMS
       3,378 100%    3.22MB/s    0:00:00 (xfr#2, ir-chk=1160/1168)
lfs-packages/SHA1SUMS
       3,850 100%    3.67MB/s    0:00:00 (xfr#3, ir-chk=1159/1168)
lfs-packages/lfs-packages-10.0-rc1.tar
    1,998,848   0% 332.10kB/s    0:22:09
```

по аналогии

```
rsync -r --progress rsync://mirror.freedif.org/blfs/
/var/www/html/lfs/blfs/
rsync -r --progress rsync://mirror.freedif.org/clfs/
/var/www/html/lfs/clfs/
```

перейдем в директорию lfs/hlfs-packages и загрузим hlfs-packages

```
cd /var/www/html/lfs/hlfs-packages
wget --recursive --no-parent
https://mirror.download.it/lfs/pub/lfs/hlfs-packages/
```

перейдем в директорию lfs/lfs-museum и загрузим alfs-museum

```
cd /var/www/html/lfs/lfs-museum
wget -r  -l 7 -nc https://linuxfromscratch.org/museum/alfs-museum/
```

```
-LFS-5.0-2.tar.bz2
Reusing existing connection to linuxfromscratch.org:443.
HTTP request sent, awaiting response... 200 OK
Length: 22124 (22K) [application/x-bzip2]
Saving to: 'linuxfromscratch.org/museum/alfs-museum/profile-LFS-5.0-2.tar.bz2'

linuxfromscratch.or 100%[===================>]  21.61K  --.-KB/s    in 0.001s

2025-03-01 14:09:43 (18.2 MB/s) - 'linuxfromscratch.org/museum/alfs-museum/profi
le-LFS-5.0-2.tar.bz2' saved [22124/22124]

--2025-03-01 14:09:43--  https://linuxfromscratch.org/museum/alfs-museum/profile
-LFS-5.0-3.tar.bz2
Reusing existing connection to linuxfromscratch.org:443.
HTTP request sent, awaiting response...
```

зеркало mariadb

```
sudo rsync -a --partial --delete-after --delay-updates
rsync.osuosl.org::mariadb /var/www/html/mariadb/
```

зеркало blender

```
rsync -r --progress rsync://mirrors.dotsrc.org/blender/
/var/www/html/floss/blender/
```

зеркало raspbian

```
rsync -r --progress rsync://mirrors.dotsrc.org/raspbian/
/var/www/html/raspbian/
```

зеркало mysql

```
rsync -r --progress rsync://mirrors.dotsrc.org/mysql/
/var/www/html/floss/mysql/
```

зеркало postgresql

```
rsync -r --progress rsync://mirrors.dotsrc.org/postgresql/
/var/www/html/floss/postgresql/
```

зеркало putty

```
rsync -r --progress rsync://mirrors.dotsrc.org/putty/
/var/www/html/floss/putty/
```

Рабочий метод скрипта для debmirror

sudo sensible-editor /home/alisa/repo/scripts/mirror_kernel.sh

#!/bin/bash -x /usr/bin/debmirror –nosource -m –passive –host=www.kernel.org \ –root=ubuntu –method=ftp –progress \ –dist=hardy,hardy-security,hardy-updates,hardy-backports \ –ignore-release-gpg –section=main,restricted,multiverse,universe \ –arch=amd64 /home/alisa/repo/kernelmirror/kernel/

cd /home/alisa/repo/scripts/ sudo chmod +x mirror_kernel.sh

./mirror_kernel.sh

sudo screen /home/alisa/repo/scripts/mirror_kernel.sh

kernelmirror/kernel

Ubuntu Kernel

```
cd /var/www/html/ubuntu_kernel
wget https://kernel.ubuntu.com
```