

```

lpanda@Ubuntu:~$ mkdir gb_new_root
lpanda@Ubuntu:~$ ls -l
итого 104
-rw-r--r-- 1 root root 409 июл 8 13:58 example01.c
-rwxr-xr-x 1 root root 16168 июл 8 13:58 example01.sh
-rw-r--r-- 1 root root 488 июл 8 14:23 example02.c
-rwxr-xr-x 1 root root 16160 июл 8 14:23 example02.sh
-rw-r--r-- 1 root root 802 июл 8 14:32 example03.c
-rwxr-xr-x 1 root root 16384 июл 8 14:33 example03.sh
drwxrwxr-x 5 lpanda lpanda 4096 июл 8 13:25 GB
drwxrwxr-x 2 lpanda lpanda 4096 июл 8 14:48 gb_new_root
drwx----- 3 lpanda lpanda 4096 июл 8 12:29 snap
drwxr-xr-x 2 lpanda lpanda 4096 июл 8 12:33 Видео
drwxr-xr-x 2 lpanda lpanda 4096 июл 8 12:33 Документы
drwxr-xr-x 2 lpanda lpanda 4096 июл 8 12:33 Загрузки
drwxr-xr-x 2 lpanda lpanda 4096 июл 8 12:33 Изображения
drwxr-xr-x 2 lpanda lpanda 4096 июл 8 12:33 Музыка
drwxr-xr-x 2 lpanda lpanda 4096 июл 8 12:33 Общедоступные
drwxr-xr-x 2 lpanda lpanda 4096 июл 8 12:33 'Рабочий стол'
drwxr-xr-x 2 lpanda lpanda 4096 июл 8 12:33 Шаблоны
lpanda@Ubuntu:~$ sudo chroot gb_new_root/
[sudo] пароль для lpanda:
chroot: failed to run command '/bin/bash': No such file or directory
lpanda@Ubuntu:~$ mkdir gb_new_root/bin
lpanda@Ubuntu:~$ mkdir gb_new_root/lib
lpanda@Ubuntu:~$ mkdir gb_new_root/lib64
lpanda@Ubuntu:~$ cp /bin/bash ./gb_new_root/bin/
lpanda@Ubuntu:~$ ldd /bin/bash
        linux-vdso.so.1 (0x00007ffffc7bc1000)
        libtinfo.so.6 => /lib/x86_64-linux-gnu/libtinfo.so.6 (0x00007f55de1a1000)
        libc.so.6 => /lib/x86_64-linux-gnu/libc.so.6 (0x00007f55dde00000)
        /lib64/ld-linux-x86-64.so.2 (0x00007f55de345000)
lpanda@Ubuntu:~$ cp /lib/x86_64-linux-gnu/libtinfo.so.6 ./gb_new_root/lib
lpanda@Ubuntu:~$ cp /lib/x86_64-linux-gnu/libtinfo.so.6^C/gb_new_root/lib
lpanda@Ubuntu:~$ cp /lib/x86_64-linux-gnu/libc.so.6 ./gb_new_root/lib
lpanda@Ubuntu:~$ cp /lib64/ld-linux-x86-64.so.2 ./gb_new_root/lib64
lpanda@Ubuntu:~$ ls -l
итого 104
-rw-r--r-- 1 root root 409 июл 8 13:58 example01.c
-rwxr-xr-x 1 root root 16168 июл 8 13:58 example01.sh
-rw-r--r-- 1 root root 488 июл 8 14:23 example02.c
-rwxr-xr-x 1 root root 16160 июл 8 14:23 example02.sh
-rw-r--r-- 1 root root 802 июл 8 14:32 example03.c
-rwxr-xr-x 1 root root 16384 июл 8 14:33 example03.sh
drwxrwxr-x 5 lpanda lpanda 4096 июл 8 13:25 GB
drwxrwxr-x 5 lpanda lpanda 4096 июл 8 14:50 gb_new_root
drwx----- 3 lpanda lpanda 4096 июл 8 12:29 snap
drwxr-xr-x 2 lpanda lpanda 4096 июл 8 12:33 Видео
drwxr-xr-x 2 lpanda lpanda 4096 июл 8 12:33 Документы

```

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lpanda@Ubuntu:~$ ls -l
итого 104
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-rwxr-xr-x 1 root root 16384 июл 8 14:33 example03.sh
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drwxr-xr-x 2 lpanda lpanda 4096 июл 8 12:33 'Рабочий стол'
drwxr-xr-x 2 lpanda lpanda 4096 июл 8 12:33 Шаблоны
lpanda@Ubuntu:~$ sudo chroot gb_new_root/
bash-5.1# ls -l
bash: ls: command not found
bash-5.1#
```



```
lpanda@Ubuntu:~$ sudo chroot gb_new_root/
bash-5.1# ls -l
bash: ls: command not found
bash-5.1# exit
exit
lpanda@Ubuntu:~$ whereis ls
ls: /usr/bin/ls /usr/share/man/man1/ls.1.gz
lpanda@Ubuntu:~$ mkdir gb_new_root/usr/bin
mkdir: невозможно создать каталог «gb_new_root/usr/bin»: Нет такого файла или каталога
lpanda@Ubuntu:~$ mkdir gb_new_root/usr
lpanda@Ubuntu:~$ mkdir gb_new_root/usr/bin
lpanda@Ubuntu:~$ cp /usr/bin/ls gb_new_root/usr/bin/
lpanda@Ubuntu:~$ ldd /usr/bin/ls
        linux-vdso.so.1 (0x00007ffffab1f6000)
        libselinux.so.1 => /lib/x86_64-linux-gnu/libselinux.so.1 (0x00007f1836b23000)
        libc.so.6 => /lib/x86_64-linux-gnu/libc.so.6 (0x00007f1836800000)
        libpcre2-8.so.0 => /lib/x86_64-linux-gnu/libpcre2-8.so.0 (0x00007f1836a8c000)
        /lib64/ld-linux-x86-64.so.2 (0x00007f1836b84000)
lpanda@Ubuntu:~$ cp /lib/x86_64-linux-gnu/libselinux.so.1 gb_new_root/lib
lpanda@Ubuntu:~$ cp /lib/x86_64-linux-gnu/libc.so.6 gb_new_root/lib
lpanda@Ubuntu:~$ cp /lib/x86_64-linux-gnu/libpcre2-8.so.0 gb_new_root/lib
lpanda@Ubuntu:~$ cp /lib64/ld-linux-x86-64.so.2 gb_new_root/lib
lib/  lib64/
lpanda@Ubuntu:~$ cp /lib64/ld-linux-x86-64.so.2 gb_new_root/lib64/
lpanda@Ubuntu:~$ sudo chroot gb_new_root/
bash-5.1# ls -l
total 16
drwxrwxr-x 2 1000 1000 4096 Jul  8 11:50 bin
drwxrwxr-x 2 1000 1000 4096 Jul  8 11:59 lib
drwxrwxr-x 2 1000 1000 4096 Jul  8 11:53 lib64
drwxrwxr-x 3 1000 1000 4096 Jul  8 11:56 usr
bash-5.1#
```

```

lpanda@Ubuntu:~$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:c2:a1:ef brd ff:ff:ff:ff:ff:ff
    inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic noprefixroute enp0s3
        valid_lft 79602sec preferred_lft 79602sec
    inet6 fe80::aa81:437d:4363:d790/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
lpanda@Ubuntu:~$ sudo ip netns add testns123
lpanda@Ubuntu:~$ sudo ip netns list
testns123
lpanda@Ubuntu:~$ sudo ip netns exec testns123 bash
root@Ubuntu:/home/lpanda# ip a
1: lo: <LOOPBACK> mtu 65536 qdisc noop state DOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
root@Ubuntu:/home/lpanda# ip a
1: lo: <LOOPBACK> mtu 65536 qdisc noop state DOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
3: veth1@if4: <BROADCAST,MULTICAST> mtu 1500 qdisc noop state DOWN group default qlen 1000
    link/ether 2a:dc:cf:0c:e8:b6 brd ff:ff:ff:ff:ff:ff link-netnsid 0
root@Ubuntu:/home/lpanda# ip addr add 10.0.0.2/24 dev veth1
root@Ubuntu:/home/lpanda# ip link set dev veth1 up
root@Ubuntu:/home/lpanda# ip a
1: lo: <LOOPBACK> mtu 65536 qdisc noop state DOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
3: veth1@if4: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue state UP group default qlen 1000
    link/ether 2a:dc:cf:0c:e8:b6 brd ff:ff:ff:ff:ff:ff link-netnsid 0
    inet 10.0.0.2/24 scope global veth1
        valid_lft forever preferred_lft forever
    inet6 fe80::28dc:cfff:fe0c:e8b6/64 scope link
        valid_lft forever preferred_lft forever
root@Ubuntu:/home/lpanda# ping 10.0.0.1
PING 10.0.0.1 (10.0.0.1) 56(84) bytes of data.
64 bytes from 10.0.0.1: icmp_seq=1 ttl=64 time=0.032 ms
64 bytes from 10.0.0.1: icmp_seq=2 ttl=64 time=0.025 ms
64 bytes from 10.0.0.1: icmp_seq=3 ttl=64 time=0.026 ms
64 bytes from 10.0.0.1: icmp_seq=4 ttl=64 time=0.028 ms
64 bytes from 10.0.0.1: icmp_seq=5 ttl=64 time=0.023 ms
64 bytes from 10.0.0.1: icmp_seq=6 ttl=64 time=0.024 ms
64 bytes from 10.0.0.1: icmp_seq=7 ttl=64 time=0.025 ms
64 bytes from 10.0.0.1: icmp_seq=8 ttl=64 time=0.022 ms
64 bytes from 10.0.0.1: icmp_seq=9 ttl=64 time=0.023 ms
64 bytes from 10.0.0.1: icmp_seq=10 ttl=64 time=0.026 ms
64 bytes from 10.0.0.1: icmp_seq=11 ttl=64 time=0.023 ms

```





lpanda@Ubuntu: ~



```
lpanda@Ubuntu:~$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:c2:a1:ef brd ff:ff:ff:ff:ff:ff
    inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic noprefixroute enp0s3
        valid_lft 79425sec preferred_lft 79425sec
    inet6 fe80::aa81:437d:4363:d790/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
lpanda@Ubuntu:~$ sudo ip link add veth0 type veth peer name veth1
[sudo] пароль для lpanda:
lpanda@Ubuntu:~$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:c2:a1:ef brd ff:ff:ff:ff:ff:ff
    inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic noprefixroute enp0s3
        valid_lft 79348sec preferred_lft 79348sec
    inet6 fe80::aa81:437d:4363:d790/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
3: veth1@veth0: <BROADCAST,MULTICAST,M-DOWN> mtu 1500 qdisc noop state DOWN group default qlen 1000
    link/ether 2a:dc:cf:0c:e8:b6 brd ff:ff:ff:ff:ff:ff
4: veth0@veth1: <BROADCAST,MULTICAST,M-DOWN> mtu 1500 qdisc noop state DOWN group default qlen 1000
    link/ether ee:e3:79:ef:13:0c brd ff:ff:ff:ff:ff:ff
lpanda@Ubuntu:~$ sudo ip link set veth1 netns testns123
lpanda@Ubuntu:~$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:c2:a1:ef brd ff:ff:ff:ff:ff:ff
    inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic noprefixroute enp0s3
        valid_lft 79285sec preferred_lft 79285sec
```



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link/ether 08:00:27:c2:a1:ef brd ff:ff:ff:ff:ff:ff
inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic noprefixroute enp0s3
    valid_lft 79285sec preferred_lft 79285sec
inet6 fe80::aa81:437d:4363:d790/64 scope link noprefixroute
    valid_lft forever preferred_lft forever
4: veth0@if3: <BROADCAST,MULTICAST> mtu 1500 qdisc noop state DOWN group default qlen 1000
    link/ether ee:e3:79:ef:13:0c brd ff:ff:ff:ff:ff:ff link-netns testns123
lpanda@Ubuntu:~$ sudo ip addr add 10.0.0.1/24 dev veth0
lpanda@Ubuntu:~$ sudo ip link set dev veth0 up
lpanda@Ubuntu:~$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:c2:a1:ef brd ff:ff:ff:ff:ff:ff
    inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic noprefixroute enp0s3
        valid_lft 79088sec preferred_lft 79088sec
    inet6 fe80::aa81:437d:4363:d790/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
4: veth0@if3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue state UP group default qlen 1000
    link/ether ee:e3:79:ef:13:0c brd ff:ff:ff:ff:ff:ff link-netns testns123
    inet 10.0.0.1/24 scope global veth0
        valid_lft forever preferred_lft forever
    inet6 fe80::ece3:79ff:feef:130c/64 scope link
        valid_lft forever preferred_lft forever
lpanda@Ubuntu:~$ ping 10.0.0.2
PING 10.0.0.2 (10.0.0.2) 56(84) bytes of data:
64 bytes from 10.0.0.2: icmp_seq=1 ttl=64 time=0.016 ms
64 bytes from 10.0.0.2: icmp_seq=2 ttl=64 time=0.025 ms
64 bytes from 10.0.0.2: icmp_seq=3 ttl=64 time=0.027 ms
64 bytes from 10.0.0.2: icmp_seq=4 ttl=64 time=0.024 ms
64 bytes from 10.0.0.2: icmp_seq=5 ttl=64 time=0.024 ms
64 bytes from 10.0.0.2: icmp_seq=6 ttl=64 time=0.025 ms
64 bytes from 10.0.0.2: icmp_seq=7 ttl=64 time=0.027 ms
64 bytes from 10.0.0.2: icmp_seq=8 ttl=64 time=0.024 ms
64 bytes from 10.0.0.2: icmp_seq=9 ttl=64 time=0.035 ms
64 bytes from 10.0.0.2: icmp_seq=10 ttl=64 time=0.027 ms
^C
--- 10.0.0.2 ping statistics ---
10 packets transmitted, 10 received, 0% packet loss, time 9206ms
rtt min/avg/max/mdev = 0.016/0.025/0.035/0.004 ms
lpanda@Ubuntu:~$

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Терминал  Сб, 8 июля 15:13
root@Ubuntu: /home/lpanda

link/ether 08:00:27:c2:a1:ef brd ff:ff:ff:ff:ff:ff
inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic noprefixroute enp0s3
    valid_lft 79602sec preferred_lft 79602sec
inet6 fe80::aa81:437d:4363:d790/64 scope link noprefixroute
    valid_lft forever preferred_lft forever
lpanda@Ubuntu:~$ sudo ip netns add testns123
lpanda@Ubuntu:~$ sudo ip netns list
testns123
lpanda@Ubuntu:~$ sudo ip netns exec testns123 bash
root@Ubuntu:/home/lpanda# ip a
1: lo: <LOOPBACK> mtu 65536 qdisc noop state DOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
root@Ubuntu:/home/lpanda# ip a
1: lo: <LOOPBACK> mtu 65536 qdisc noop state DOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
3: veth@if4: <BROADCAST,MULTICAST> mtu 1500 qdisc noop state DOWN group default qlen 1000
    link/ether 2a:dc:cf:0c:e8:b6 brd ff:ff:ff:ff:ff:ff link-netnsid 0
root@Ubuntu:/home/lpanda# ip addr add 10.0.0.2/24 dev veth1
root@Ubuntu:/home/lpanda# ip link set dev veth1 up
root@Ubuntu:/home/lpanda# ip a
1: lo: <LOOPBACK> mtu 65536 qdisc noop state DOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
3: veth@if4: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue state UP group default qlen 1000
    link/ether 2a:dc:cf:0c:e8:b6 brd ff:ff:ff:ff:ff:ff link-netnsid 0
    inet 10.0.0.2/24 scope global veth1
        valid_lft forever preferred_lft forever
    inet6 fe80::28dc:cfff:fe0c:e8b6/64 scope link
        valid_lft forever preferred_lft forever
root@Ubuntu:/home/lpanda# ping 10.0.0.1
PING 10.0.0.1 (10.0.0.1) 56(84) bytes of data:
64 bytes from 10.0.0.1: icmp_seq=1 ttl=64 time=0.032 ms
64 bytes from 10.0.0.1: icmp_seq=2 ttl=64 time=0.025 ms
64 bytes from 10.0.0.1: icmp_seq=3 ttl=64 time=0.026 ms
64 bytes from 10.0.0.1: icmp_seq=4 ttl=64 time=0.028 ms
64 bytes from 10.0.0.1: icmp_seq=5 ttl=64 time=0.023 ms
64 bytes from 10.0.0.1: icmp_seq=6 ttl=64 time=0.024 ms
64 bytes from 10.0.0.1: icmp_seq=7 ttl=64 time=0.025 ms
64 bytes from 10.0.0.1: icmp_seq=8 ttl=64 time=0.022 ms
64 bytes from 10.0.0.1: icmp_seq=9 ttl=64 time=0.023 ms
64 bytes from 10.0.0.1: icmp_seq=10 ttl=64 time=0.026 ms
64 bytes from 10.0.0.1: icmp_seq=11 ttl=64 time=0.023 ms
64 bytes from 10.0.0.1: icmp_seq=12 ttl=64 time=0.021 ms
64 bytes from 10.0.0.1: icmp_seq=13 ttl=64 time=0.038 ms
64 bytes from 10.0.0.1: icmp_seq=14 ttl=64 time=0.020 ms
^C
--- 10.0.0.1 ping statistics ---
14 packets transmitted, 14 received, 0% packet loss, time 13329ms
rtt min/avg/max/mdev = 0.020/0.025/0.038/0.004 ms
root@Ubuntu:/home/lpanda#
```

```
lpanda@Ubuntu:~$
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:c2:a1:ef brd ff:ff:ff:ff:ff:ff
    inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic noprefixroute enp0s3
        valid_lft 79285sec preferred_lft 79285sec
    inet6 fe80::aa81:437d:4363:d790/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
4: veth@if3: <BROADCAST,MULTICAST> mtu 1500 qdisc noop state DOWN group default qlen 1000
    link/ether ee:e3:79:ef:13:0c brd ff:ff:ff:ff:ff:ff link-netns testns123
lpanda@Ubuntu:~$ sudo ip addr add 10.0.0.1/24 dev veth0
lpanda@Ubuntu:~$ sudo ip link set dev veth0 up
lpanda@Ubuntu:~$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:c2:a1:ef brd ff:ff:ff:ff:ff:ff
    inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic noprefixroute enp0s3
        valid_lft 79088sec preferred_lft 79088sec
    inet6 fe80::aa81:437d:4363:d790/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
4: veth@if3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue state UP group default qlen 1000
    link/ether ee:e3:79:ef:13:0c brd ff:ff:ff:ff:ff:ff link-netns testns123
    inet 10.0.0.1/24 scope global veth0
        valid_lft forever preferred_lft forever
    inet6 fe80::eece3:79ff:feef:130c/64 scope link
        valid_lft forever preferred_lft forever
lpanda@Ubuntu:~$ ping 10.0.0.2
PING 10.0.0.2 (10.0.0.2) 56(84) bytes of data:
64 bytes from 10.0.0.2: icmp_seq=1 ttl=64 time=0.016 ms
64 bytes from 10.0.0.2: icmp_seq=2 ttl=64 time=0.025 ms
64 bytes from 10.0.0.2: icmp_seq=3 ttl=64 time=0.027 ms
64 bytes from 10.0.0.2: icmp_seq=4 ttl=64 time=0.024 ms
64 bytes from 10.0.0.2: icmp_seq=5 ttl=64 time=0.024 ms
64 bytes from 10.0.0.2: icmp_seq=6 ttl=64 time=0.025 ms
64 bytes from 10.0.0.2: icmp_seq=7 ttl=64 time=0.027 ms
64 bytes from 10.0.0.2: icmp_seq=8 ttl=64 time=0.024 ms
64 bytes from 10.0.0.2: icmp_seq=9 ttl=64 time=0.035 ms
64 bytes from 10.0.0.2: icmp_seq=10 ttl=64 time=0.027 ms
^C
--- 10.0.0.2 ping statistics ---
10 packets transmitted, 10 received, 0% packet loss, time 9206ms
rtt min/avg/max/mdev = 0.016/0.025/0.035/0.004 ms
lpanda@Ubuntu:~$
```



```

lpanda@Ubuntu:~$ ls -l /proc/$$/ns
итого 0
lrwxrwxrwx 1 lpanda lpanda 0 июл  8 15:16 cgroup -> 'cgroup:[4026531835]'
lrwxrwxrwx 1 lpanda lpanda 0 июл  8 15:16 ipc -> 'ipc:[4026531839]'
lrwxrwxrwx 1 lpanda lpanda 0 июл  8 15:16 mnt -> 'mnt:[4026531841]'
lrwxrwxrwx 1 lpanda lpanda 0 июл  8 15:16 net -> 'net:[4026531840]'
lrwxrwxrwx 1 lpanda lpanda 0 июл  8 15:16 pid -> 'pid:[4026531836]'
lrwxrwxrwx 1 lpanda lpanda 0 июл  8 15:16 pid_for_children -> 'pid:[4026531836]'
lrwxrwxrwx 1 lpanda lpanda 0 июл  8 15:16 time -> 'time:[4026531834]'
lrwxrwxrwx 1 lpanda lpanda 0 июл  8 15:16 time_for_children -> 'time:[4026531834]'
lrwxrwxrwx 1 lpanda lpanda 0 июл  8 15:16 user -> 'user:[4026531837]'
lrwxrwxrwx 1 lpanda lpanda 0 июл  8 15:16 uts -> 'uts:[4026531838]'
lpanda@Ubuntu:~$ sudo unshare --pid --net --fork --mount-proc /bin/bash
root@Ubuntu:/home/lpanda# ls -l /proc/$$/ns
итого 0
lrwxrwxrwx 1 root root 0 июл  8 15:21 cgroup -> 'cgroup:[4026531835]'
lrwxrwxrwx 1 root root 0 июл  8 15:21 ipc -> 'ipc:[4026531839]'
lrwxrwxrwx 1 root root 0 июл  8 15:21 mnt -> 'mnt:[4026532389]'
lrwxrwxrwx 1 root root 0 июл  8 15:21 net -> 'net:[4026532432]'
lrwxrwxrwx 1 root root 0 июл  8 15:21 pid -> 'pid:[4026532431]'
lrwxrwxrwx 1 root root 0 июл  8 15:21 pid_for_children -> 'pid:[4026532431]'
lrwxrwxrwx 1 root root 0 июл  8 15:21 time -> 'time:[4026531834]'
lrwxrwxrwx 1 root root 0 июл  8 15:21 time_for_children -> 'time:[4026531834]'
lrwxrwxrwx 1 root root 0 июл  8 15:21 user -> 'user:[4026531837]'
lrwxrwxrwx 1 root root 0 июл  8 15:21 uts -> 'uts:[4026531838]'
root@Ubuntu:/home/lpanda# exit

```





```
top - 15:22:38 up 2:13, 2 users, load average: 0,12, 0,12, 0,08
Tasks: 2 total, 1 running, 1 sleeping, 0 stopped, 0 zombie
%Cpu(s): 1,3 us, 0,5 sy, 0,0 ni, 98,2 id, 0,0 wa, 0,0 hi, 0,0 si, 0,0 st
МиБ Mem : 7936,8 total, 6131,0 free, 922,6 used, 883,2 buff/cache
МиБ Swap: 2048,0 total, 2048,0 free, 0,0 used. 6741,8 avail Mem
```

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
1	root	20	0	19208	4364	3752	S	0,0	0,1	0:00.00	bash
9	root	20	0	22000	4092	3484	R	0,0	0,1	0:00.00	top

```
root@Ubuntu:/home/lpanda# ip a
1: lo: <LOOPBACK> mtu 65536 qdisc noop state DOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
root@Ubuntu:/home/lpanda#
```