

## Администрирование Ubuntu Linux

Настройка безопасности Ubuntu Linux состоит из 3 пунктов:

- настройка общей памяти:
  - настройка доступа к общему каталогу:
  - настройка брандмауэра.

Как пример представлена последняя поддерживаемая версия Ubuntu.

```
DESKTOP-MJL7LCC:~# uname -a
Linux DESKTOP-MJL7LCC 6.6.87.2-microsoft-standard-WSL2 #1 SMP PREEMPT_DYNAMIC Thu Jun  5 18:30:46 UTC 2025 x86_64 Linux
DESKTOP-MJL7LCC:~#
```

Рисунок 1 – Версия Ubuntu.

## 1. Настройка общей памяти.

По умолчанию доступен просмотр всех файлов. Исправить это нам поможет исправление файла доступа.

```
DESKTOP-H0L7LCC:\# find / -type d -perm -0002 -exec ls -ld {} \; >/dev/null
drwxrwxrwx 2 root root 4096 May 22 2024 /var/tmp
drwxrwxrwx 2 root root 4096 Nov 18 06:20 /tmp
drwxrwxrwx 2 root root 6 Nov 12 05:18 /tmp/X11-unix
drwxrwxrwx 2 root root 6 Nov 12 05:18 /mnt/host/wsl
drwxrwxrwx 1 root root 512 Nov 11 22:01 /mnt/host/
drwxrwxrwx 1 root root 512 Nov 10 08:27 /mnt/host/c/SRecycle.Bin
drwxrwxrwx 1 root root 512 Nov 11 07:48 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001
drwxrwxrwx 1 root root 512 Nov 3 07:27 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$R81IEWG
drwxrwxrwx 1 root root 512 Dec 28 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$R81IEWG/Intel
drwxrwxrwx 1 root root 512 Aug 20 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$R81IEWG/Intel/Bluetooth
drwxrwxrwx 1 root root 512 Nov 3 07:27 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$R81IEWG/Intel/Bluetooth/CCP
drwxrwxrwx 1 root root 512 Dec 28 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$R81IEWG/RTK5
drwxrwxrwx 1 root root 512 Nov 3 07:27 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$R81IEWG/RTK5/Bluetooth
drwxrwxrwx 1 root root 512 Dec 28 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$R81IEWG/RTK6
drwxrwxrwx 1 root root 512 Nov 3 07:27 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$R81IEWG/RTK6/Bluetooth
drwxrwxrwx 1 root root 512 Dec 28 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$R81IEWG/RTKBE
drwxrwxrwx 1 root root 512 Nov 3 07:27 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$R81IEWG/RTKBE/Bluetooth
drwxrwxrwx 1 root root 512 Oct 17:06 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$R9XBDIV.service
drwxrwxrwx 1 root root 512 Oct 6 17:06 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$RCRN07.github
drwxrwxrwx 1 root root 512 Oct 17:06 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$RCRN07.github/ISSUE_TEMPLATE
drwxrwxrwx 1 root root 512 Oct 17:06 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$RCRN07.github/workflows
drwxrwxrwx 1 root root 512 Oct 21 15:07 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$RDHSMW
drwxrwxrwx 1 root root 512 Jul 2 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$JIN0YS
drwxrwxrwx 1 root root 512 Jul 1 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$JIN0YS/BT_Intel_22_30_0.4
drwxrwxrwx 1 root root 512 Jul 1 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$JIN0YS/BT_Intel_22_30_0.4/source
drwxrwxrwx 1 root root 512 Jul 1 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$JIN0YS/BT_RTK_2.8_1053.3000
drwxrwxrwx 1 root root 512 Jul 1 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$JIN0YS/BT_RTK_2.8_1053.3000/source
drwxrwxrwx 1 root root 512 Dec 28 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$LRBZ03
drwxrwxrwx 1 root root 512 Dec 28 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$LRBZ03/Intel
drwxrwxrwx 1 root root 512 Aug 9 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$LRBZ03/Intel/WLAN
drwxrwxrwx 1 root root 512 Aug 9 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$LRBZ03/Intel/WLAN/Drivers
drwxrwxrwx 1 root root 512 Aug 9 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$LRBZ03/Intel/WLAN/Installer
drwxrwxrwx 1 root root 512 Aug 9 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$LRBZ03/Intel/WLAN/Installer/Extensions
drwxrwxrwx 1 root root 512 Aug 9 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$LRBZ03/Intel/WLAN/Tools
drwxrwxrwx 1 root root 512 Aug 9 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$LRBZ03/Intel/WLAN/Tools/Diagnostics
drwxrwxrwx 1 root root 512 Aug 9 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$LRBZ03/Intel/WLAN/Tools/Diagnostics/ETW
drwxrwxrwx 1 root root 512 Aug 9 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$LRBZ03/Intel/WLAN/Tools/Diagnostics/ETW/Driver
drwxrwxrwx 1 root root 512 Aug 9 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$LRBZ03/Intel/WLAN/Tools/Diagnostics/RESOURCES
drwxrwxrwx 1 root root 512 Aug 9 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$LRBZ03/Intel/WLAN/Utilities
drwxrwxrwx 1 root root 512 Aug 9 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$LRBZ03/Intel/WLAN/Utilities/PIE
drwxrwxrwx 1 root root 512 Aug 9 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$LRBZ03/Intel/WLAN/Utilities/Special Configs
drwxrwxrwx 1 root root 512 Dec 28 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$LRBZ03/RTKS
drwxrwxrwx 1 root root 512 Aug 10 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$LRBZ03/RTKS/WLAN
drwxrwxrwx 1 root root 512 Dec 28 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$LRBZ03/RTK6
drwxrwxrwx 1 root root 512 Aug 10 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$LRBZ03/RTK6/WLAN
drwxrwxrwx 1 root root 512 Dec 28 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$LRBZ03/RTKBE
drwxrwxrwx 1 root root 512 Dec 8 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$LRBZ03/RTKBE/WLAN
drwxrwxrwx 1 root root 512 Oct 22 12:20 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$R91E9
drwxrwxrwx 1 root root 512 Oct 22 11:58 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$R81ISH
drwxrwxrwx 1 root root 512 Dec 28 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$RQ2768
drwxrwxrwx 1 root root 512 Sep 18 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$RQ2768/Elan
drwxrwxrwx 1 root root 512 Nov 29 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$RQ2768/FPC
drwxrwxrwx 1 root root 512 Nov 29 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$RQ2768/FPC/fpc_ea
drwxrwxrwx 1 root root 512 Nov 29 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$RQ2768/FPC/fpc_enclave
drwxrwxrwx 1 root root 512 Nov 29 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$RQ2768/FPC/fpc_enclave/Prerelease_no_sgx
drwxrwxrwx 1 root root 512 Nov 29 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$RQ2768/FPC/fpc_encclave/prerelease_no_sgx/x64
drwxrwxrwx 1 root root 512 Nov 29 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$RQ2768/FPC/fw_inf
drwxrwxrwx 1 root root 512 Nov 29 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$RQ2768/FPC/fw_inf/x64
drwxrwxrwx 1 root root 512 Nov 29 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$RQ2768/FPC/fw_inf/x64/fpc_fw_update
drwxrwxrwx 1 root root 512 Nov 29 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$RQ2768/FPC/fw_inf/x64/fpc_wbdi
drwxrwxrwx 1 root root 512 Nov 29 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$RQ2768/FPC/fw_inf/x64/fpc_wbdi
drwxrwxrwx 1 root root 512 Sep 18 2021 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$RQ2768/Goodix
drwxrwxrwx 1 root root 512 Oct 6 17:06 /mnt/host/c/SRecycle.Bin-S-1-5-21-3410180652-1157041246-2385921459-1001/$RS2SHDY
drwxrwxrwx 1 root root 512 Oct 19 18:48 /mnt/host/c/HSarche
```

Рисунок 1.1 – Общедоступные репозитории.

## Защищаем временные каталоги

```
DESKTOP-MJL7LCC:~# chmod 1777 /tmp  
DESKTOP-MJL7LCC:~# chmod 1777 /var/tmp  
DESKTOP-MJL7LCC:~#
```

Рисунок 1.2 – Защищаем временные данные.

Так же настроим fstab для полной изоляции.

```
DESKTOP-MJL7LCC:~# echo "tmpfs /tmp tmpfs defaults,nosuid,nodev,noexec 0 0" >> /etc/fstab  
DESKTOP-MJL7LCC:~#
```

Рисунок 1.3 – Настройка fstab.

## 2 Настройка брандауэра.

Для безопасности вашей системы и данных рекомендуется устанавливать брэндмауэр. Процесс установки представлен на рисунках.

```
DESKTOP-MJL7LCC:~# apt  
-sh: apt: not found  
DESKTOP-MJL7LCC:~#  
DESKTOP-MJL7LCC:~# apk update  
fetch https://dl-cdn.alpinelinux.org/alpine/v3.20/main/x86_64/APKINDEX.tar.gz  
fetch https://dl-cdn.alpinelinux.org/alpine/v3.20/community/x86_64/APKINDEX.tar.gz  
v3.20.8-57-gd41b060b815 [https://dl-cdn.alpinelinux.org/alpine/v3.20/main]  
v3.20.8-56-gc6567a17e07 [https://dl-cdn.alpinelinux.org/alpine/v3.20/community]  
OK: 24181 distinct packages available  
DESKTOP-MJL7LCC:~# cat /etc/os-release  
/nullPRETTY_NAME="Docker Desktop"  
DESKTOP-MJL7LCC:~# which yum apk pacman 2>/dev/null  
/sbin/apk  
DESKTOP-MJL7LCC:~# bash --version  
-sh: bash: not found  
DESKTOP-MJL7LCC:~#
```

Рисунок 2.1 – Установка брандмауэра.