

Лабораторная работа №5

Операционные системы

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Познакомиться с pass, gopass, native messaging, chezmoi. Научиться пользоваться этими утилитами, синхронизировать их с гит.

1. Установить дополнительное ПО
2. Установить и настроить pass
3. Настроить интерфейс с браузером
4. Сохранить пароль
5. Установить и настроить chezmoi
6. Настроить chezmoi на новой машине
7. Выполнить ежедневные операции с chezmoi

```
dnf install pass pass-otp
Last metadata expiration check: 1:19:27 ago on Fri 14 Mar 2025 05:45:48 PM MSK.
Package pass-1.7.4-10.fc40.noarch is already installed.
Package pass-otp-1.2.0-14.fc40.noarch is already installed.
Dependencies resolved.
Nothing to do.
Complete!
root@vbox:/home/ssnikulenkov/work/study/2024-2025/Операционные системы/os-intro#
dnf install gopass
Last metadata expiration check: 1:19:49 ago on Fri 14 Mar 2025 05:45:48 PM MSK.
Package gopass-1.15.14-1.fc40.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
root@vbox:/home/ssnikulenkov/work/study/2024-2025/Операционные системы/os-intro#
```

Рис. 1: Установка

Просмотрим список ключей. Инициализируем хранилище. Синхронизируемс git Создадим структуру git.

```
root@vbox:/home/ssnikulenkov/work/study/2024-2025/Операционные системы/os-intro#  
gpg --list-secret-keys  
[keyboxd]  
-----  
sec   rsa4096 2025-03-08 [SC]  
      72F471470AB8131188A04C628B2A7AF04F2C6A3F  
uid    [ultimate] Stepan Nikulenkov <stepannikulenkov@gmail.com>  
ssb   rsa4096 2025-03-08 [E]  
  
root@vbox:/home/ssnikulenkov/work/study/2024-2025/Операционные системы/os-intro#  
pass init 72F471470AB8131188A04C628B2A7AF04F2C6A3F  
Password store initialized for 72F471470AB8131188A04C628B2A7AF04F2C6A3F  
root@vbox:/home/ssnikulenkov/work/study/2024-2025/Операционные системы/os-intro#  
pass git init  
Reinitialized existing Git repository in /root/.password-store/.git/
```

Рис. 2: инициализация

Для синхронизации выполняется следующая команда: `pass git pull pass git push`

```
root@vbox:/home/ssnikulenkov/work/study/2024-2025/Операционные системы/os-intro#  
git remote -v  
origin  git@github.com:stepannikulenkov/study_2024-2025_os-intro.git (fetch)  
origin  git@github.com:stepannikulenkov/study_2024-2025_os-intro.git (push)  
root@vbox:/home/ssnikulenkov/work/study/2024-2025/Операционные системы/os-intro#  
git pull origin master  
From github.com:stepannikulenkov/study_2024-2025_os-intro  
* branch      master      -> FETCH_HEAD  
Already up to date.  
root@vbox:/home/ssnikulenkov/work/study/2024-2025/Операционные системы/os-intro#  
git push origin master  
Everything up-to-date
```

Рис. 3: синхронизация

Для взаимодействия с браузером используем интерфейс native messaging.

Please enter the passphrase to unlock the OpenPGP secret key:
"Stepan Nikulenkov <stepannikulenkov@gmail.com>"
4096-bit RSA key, ID 8B2A7AF04F2C6A3F,
created 2025-03-08.

Passphrase: ***

<OK>

<Cancel>

Добавим новый пароль. Отообразим пароль для указанного имени файла. Заменяем существующий пароль

```
root@vbox:/home/ssnikulenkov/work/study/2024-2025/Операционные системы/os-intro#  
dnf copr enable maximbaz/browserpass  
No such command: copr. Please use /usr/bin/dnf --help  
It could be a DNF plugin command, try: "dnf install 'dnf-command(copr)'"  
root@vbox:/home/ssnikulenkov/work/study/2024-2025/Операционные системы/os-intro#  
dnf copr enable maximbaz/browserpass  
Enabling a Copr repository. Please note that this repository is not part  
of the main distribution, and quality may vary.  
  
The Fedora Project does not exercise any power over the contents of  
this repository beyond the rules outlined in the Copr FAQ at  
<https://docs.pagure.org/copr.copr/user\_documentation.html#what-i-can-build-in-copr>,  
and packages are not held to any quality or security level.  
  
Please do not file bug reports about these packages in Fedora  
Bugzilla. In case of problems, contact the owner of this repository.  
  
Do you really want to enable copr.fedorainfracloud.org/maximbaz/browserpass? [y/  
N]: y  
Repository successfully enabled.  
root@vbox:/home/ssnikulenkov/work/study/2024-2025/Операционные системы/os-intro#  
dnf install browserpass
```

Рис. 4: добавление пароля

Установим дополнительное программное обеспечение. Установим шрифты.

```
root@vbox:/home/ssnikulenkov/work/study/2024-2025/Операционные системы/os-intro#  
pass insert password/password  
mkdir: created directory '/root/.password-store/password'  
Enter password for password/password:  
Retype password for password/password:  
[master cb3412] Add given password for password/password to store.  
1 file changed, 0 insertions(+), 0 deletions(-)  
create mode 100644 password/password.gpg  
root@vbox:/home/ssnikulenkov/work/study/2024-2025/Операционные системы/os-intro#  
pass generate --in-place password/password  
[master 1dc720b] Replace generated password for password/password.  
1 file changed, 0 insertions(+), 0 deletions(-)  
The generated password for password/password is:  
tz(dtd$SC|M,BuVr,tC[z7J_w
```

Рис. 5: установка

```
root@vbox:/home/ssnikulenkov/work/study/2024-2025/Операционные системы/os-intro#  
sudo dnf -y install \  
    dunst \  
    fontawesome-fonts \  
    powerline-fonts \  
    light \  
    fuzzel \  
    swaylock \  
    kitty \  
    waybar swaybg \  
    swayidle
```

Установим бинарный файл. Создадим собственный репозиторий с помощью утилит

```
Complete!
root@vbox: /home/ssnikulenkov/work/study/2024-2025/Операционные системы/os-intro#
sudo dnf copr enable peterwu/iosevka
sudo dnf search iosevka
sudo dnf install iosevka-fonts iosevka-aile-fonts iosevka-curly-fonts iosevka-sl
ab-fonts iosevka-etoile-fonts iosevka-term-fonts
Enabling a Copr repository. Please note that this repository is not part
of the main distribution, and quality may vary.

The Fedora Project does not exercise any power over the contents of
this repository beyond the rules outlined in the Copr FAQ at
<https://docs.pagure.org/copr.copr/user\_documentation.html#what-i-can-build-in-copr>,
and packages are not held to any quality or security level.

Please do not file bug reports about these packages in Fedora
Bugzilla. In case of problems, contact the owner of this repository.

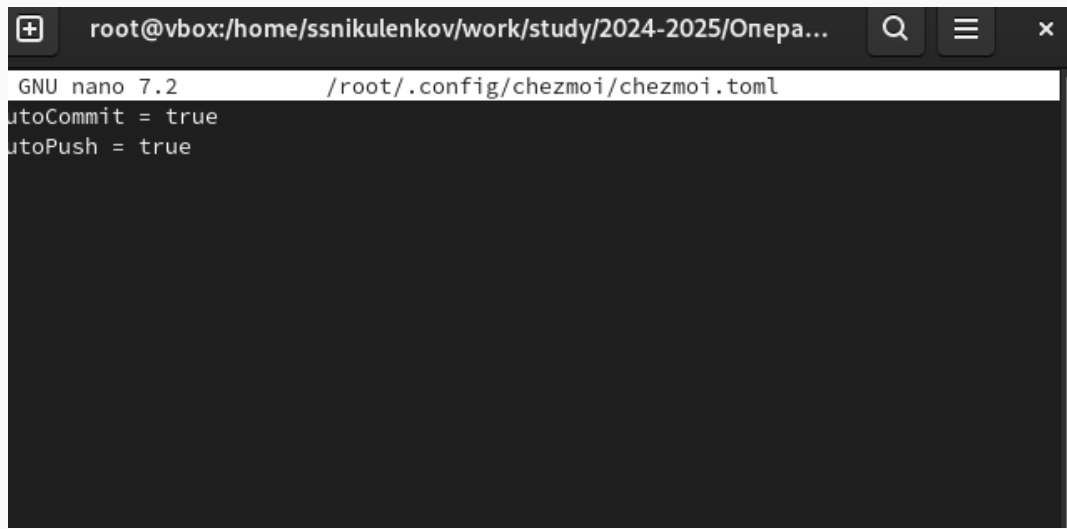
Do you really want to enable copr.fedorainfracloud.org/peterwu/iosevka? [y/N]: y
Repository successfully enabled.
Copr repo for iosevka owned by peterwu          30 kB/s | 29 kB      00:00
===== Name Exactly Matched: iosevka =====
iosevka.src : Slender typeface for code, from code.
===== Name Matched: iosevka =====
```

Рис. 7: установка

На второй машине инициализируем chezmoi с репозиторием dotfiles. Проверим, какие изменения внесёт chezmoi в домашний каталог.

```
root@vbox: /home/ssnikulnikov/work/study/2024-2025/Операционные системы/os-intro#
chezmoi init git@github.com:stepannikulnikov/study_2024-2025_os-intro.git
Cloning into '/root/.local/share/chezmoi'...
remote: Enumerating objects: 117, done.
remote: Counting objects: 100% (117/117), done.
remote: Compressing objects: 100% (98/98), done.
remote: Total 117 (delta 23), reused 91 (delta 10), pack-reused 0 (from 0)
Receiving objects: 100% (117/117), 5.10 MiB | 960.00 KiB/s, done.
Resolving deltas: 100% (23/23), done.
Submodule 'template/presentation' (https://github.com/yamadharma/academic-presentation-markdown-template.git) registered for path 'template/presentation'
Submodule 'template/report' (https://github.com/yamadharma/academic-laboratory-report-template.git) registered for path 'template/report'
Cloning into '/root/.local/share/chezmoi/template/presentation'...
remote: Enumerating objects: 111, done.
remote: Counting objects: 100% (111/111), done.
remote: Compressing objects: 100% (77/77), done.
remote: Total 111 (delta 42), reused 100 (delta 31), pack-reused 0 (from 0)
Receiving objects: 100% (111/111), 102.17 KiB | 1.13 MiB/s, done.
Resolving deltas: 100% (42/42), done.
Cloning into '/root/.local/share/chezmoi/template/report'...
remote: Enumerating objects: 142, done.
remote: Counting objects: 100% (142/142), done.
remote: Compressing objects: 100% (97/97), done.
remote: Total 142 (delta 60), reused 121 (delta 39), pack-reused 0 (from 0)
```

добавим в файл конфигурации ~/.config/chezmoi/chezmoi.toml следующие строки

A terminal window with a dark theme. The title bar shows 'root@vbox:/home/ssnikulenkov/work/study/2024-2025/Опера...'. The terminal content shows the GNU nano 7.2 editor editing the file /root/.config/chezmoi/chezmoi.toml. The visible text in the editor is 'utoCommit = true' and 'utoPush = true'. A closing curly brace '}' is visible at the bottom right of the terminal area.

```
GNU nano 7.2 /root/.config/chezmoi/chezmoi.toml
utoCommit = true
utoPush = true
}
```

#fig:010width=70% }

Мы познакомились с pass, gopass, native messaging, chezmoi. Научились пользоваться этими утилитами, синхронизировали их с гит.