

# Архитектура компьютера Отчёт по лабораторной работе №4

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## 1 Описание задачи

### 1. Настройка менеджера паролей `pass`:

- Установка `pass` и `gopass`.
- Генерация GPG-ключа и инициализация хранилища паролей.
- Синхронизация с Git для резервного копирования.

### 2. Интеграция с графическими интерфейсами и браузерами:

- Установка графических интерфейсов (`qtpass`, `gopass-ui`).
- Настройка плагина `browserpass` для браузеров.

### 3. Управление конфигурациями с помощью `chezmoi`:

- Установка `chezmoi` и создание репозитория для конфигураций.
- Инициализация и применение конфигураций на нескольких машинах.

### 4. Установка дополнительного ПО:

- Установка полезных утилит и шрифтов для завершения настройки среды.

## 2 Описание результатов выполнения задания

### 1. Установка и настройка менеджера паролей `pass`

#### • Установка `pass`

- Fedora: `sudo dnf install pass pass-otp`
- Другие системы: используйте соответствующий пакетный менеджер для установки `pass` и `gopass`.

```
liveuser@localhost-live:~/work/student_2025_lx$ sudo dnf install pass pass-otp
Last metadata expiration check: 1:10:59 ago on Fri 14 Mar 2025 04:25:35 AM EDT.
Dependencies resolved.
=====
Package                Arch      Version              Repository           Size
=====
Installing:
pass                   noarch    1.7.4-10.fc40        fedora               59 k
pass-otp               noarch    1.2.0-14.fc40        fedora               28 k
Installing dependencies:
liboath                x86_64    2.6.12-1.fc40        updates             49 k
oathtool               x86_64    2.6.12-1.fc40        updates             46 k
qrencode               x86_64    4.1.1-7.fc40         fedora              25 k
Installing weak dependencies:
wl-clipboard           x86_64    2.2.1-2.fc40         fedora              54 k
xclip                  x86_64    0.13-21.git11cba61.fc40 fedora              37 k
Transaction Summary
=====
Install 7 Packages

Total download size: 298 k
Installed size: 625 k
```

- Генерация GPG-ключа

- Просмотр существующих ключей: `gpg --list-secret-keys`
- Генерация нового ключа: `gpg --full-generate-key`

```
liveuser@localhost-live:~/work/student_2025_lx$ gpg --list-secret-keys
[keyboxd]
-----
sec   rsa3072 2025-03-14 [SC]
      CD18C1A54451E7CA532B599699CD5AC04D1F124C
uid           [ultimate] liuxiao <1915054374@qq.com>
ssb   rsa3072 2025-03-14 [E]

liveuser@localhost-live:~/work/student_2025_lx$
```

- Инициализация хранилища паролей

- Инициализация с использованием GPG-ключа: `pass init <gpg-id or email>`

```
liveuser@localhost-live:~/work/student_2025_lx$ pass init 1915054374@qq.com
mkdir: created directory '/home/liveuser/.password-store/'
Password store initialized for 1915054374@qq.com
liveuser@localhost-live:~/work/student_2025_lx$
```

- Синхронизация с Git

- Инициализация Git-репозитория: `pass git init`
- Добавление удаленного репозитория: `pass git remote add origin git@github.com:<git_username>/<git_repo>.git`

- Синхронизация изменений: `pass git pull` и `pass git push`

```
liveuser@localhost-live:~/work/student_2025_lx$ pass git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /home/liveuser/.password-store/.git/
[master (root-commit) 49099ed] Add current contents of password store.
 1 file changed, 1 insertion(+)
 create mode 100644 .gpg-id
[master c5e756f] Configure git repository for gpg file diff.
 1 file changed, 1 insertion(+)
 create mode 100644 .gitattributes
liveuser@localhost-live:~/work/student_2025_lx$
```

```
liveuser@localhost-live:~/work/student_2025_lx$ pass git remote add origin git@github.com:Isbigheader/student_2025_lx.git
liveuser@localhost-live:~/work/student_2025_lx$
```

```
liveuser@localhost-live:~/work/student_2025_lx$ pass git pull
remote: Enumerating objects: 130, done.
remote: Counting objects: 100% (130/130), done.
remote: Compressing objects: 100% (119/119), done.
remote: Total 130 (delta 18), reused 108 (delta 9), pack-reused 0 (from 0)
Receiving objects: 100% (130/130), 8.59 MiB | 520.00 KiB/s, done.
Resolving deltas: 100% (18/18), done.
From github.com:Isbigheader/student_2025_lx
 * [new branch]      develop      -> origin/develop
 * [new branch]      feature/develop -> origin/feature/develop
 * [new branch]      master       -> origin/master
 * [new branch]      release1.2.3 -> origin/release1.2.3
There is no tracking information for the current branch.
Please specify which branch you want to merge with.
See git-pull(1) for details.

    git pull <remote> <branch>

If you wish to set tracking information for this branch you can do so with:

    git branch --set-upstream-to=origin/<branch> master

liveuser@localhost-live:~/work/student_2025_lx$ pass git push
```

- Ручное управление паролями

- Добавление нового пароля: `pass insert [OPTIONAL DIR]/[FILENAME]`
- Просмотр пароля: `pass [OPTIONAL DIR]/[FILENAME]`

- Замена пароля: `pass generate --in-place FILENAME`

```
liveuser@localhost-live:~/work$ pass insert /pwd
Enter password for /pwd:
Retype password for /pwd:
[master 7af6026] Add given password for /pwd to store.
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 pwd.gpg
liveuser@localhost-live:~/work$
```

```
liveuser@localhost-live:~/work$ pass /pwd
2598
liveuser@localhost-live:~/work$ pass generate --in-place pwd
[master a061fe3] Replace generated password for pwd.
1 file changed, 0 insertions(+), 0 deletions(-)
The generated password for pwd is:
/<HWafhX.~e;"PmoNOpQziZB
liveuser@localhost-live:~/work$ pass /pwd
/<HWafhX.~e;"PmoNOpQziZB
liveuser@localhost-live:~/work$
```

## 2. Настройка графического интерфейса и интеграции с браузером

- Установка графического интерфейса

- `qtpass`: графический интерфейс для `pass` и `gnupg`.
- `gorass-ui`: графический интерфейс для `gorass`.
- `webpass`: веб-интерфейс для `pass`.

- Интеграция с браузером

- Установка плагина `browserpass`: [Firefox](#) или [Chrome](#)
- Установка `browserpass-native`:
  - Fedora: `sudo dnf copr enable maximbaz/browserpass && sudo dnf install browserpass`

```
liveuser@localhost-live:~/work$ sudo -i
root@localhost-live:~# sudo dnf install browserpass
Last metadata expiration check: 2:22:59 ago on Fri 14 Mar 2025 04:25:35 AM EDT.
Dependencies resolved.
=====
Package                Architecture Version           Repository      Size
=====
Installing:
 browserpass            x86_64         3.1.0-2.fc40     updates        1.1 M
=====
Transaction Summary
=====
Install 1 Package

Total download size: 1.1 M
Installed size: 2.9 M
Is this ok [y/N]: y
Downloading Packages:
browserpass-3.1.0-2.fc40.x86_64.rpm                846 kB/s | 1.1 MB    00:01
-----
Total                                              486 kB/s | 1.1 MB    00:02
Running transaction check
```

### 3. Использование **chezmoi** для управления конфигурационными файлами

- Установка **chezmoi**

- Установка с помощью **wget**: `sh -c "$(wget -qO- chezmoi.io/get)"`

```
liveuser@localhost-live:~/work$ sh -c "$(curl -fsLS get.chezmoi.io)" -- init --a
pply $GITHUB_USERNAME
info found version 2.60.1 for latest/linux/amd64
info found glibc version 2.39
info installed bin/chezmoi
```

- Создание и управление репозиторием конфигураций

- Создание репозитория: `gh repo create dotfiles --template="yamadharma/dotfiles-template" --private`
- Инициализация **chezmoi**: `chezmoi init git@github.com:<username>/dotfiles.git`
- Проверка изменений: `chezmoi diff`
- Применение изменений: `chezmoi apply -v`

```
root@localhost-live:~# chezmoi init git@github.com:Isbigheader/dotfiles.git
root@localhost-live:~#
```

### 4. Установка и настройка дополнительного ПО

- Установка полезных утилит

- Fedora: `sudo dnf -y install dunst fontawesome-fonts powerline-fonts light fuzzel swaylock kitty waybar swaybg wl-clipboard mpv grim slurp`

```
root@localhost-live:~# sudo dnf -y install dunst fontawesome-fonts powerline-fon
ts light fuzzel swaylock kitty waybar swaybg wl-clipboard mpv grim slurp
Last metadata expiration check: 2:45:23 ago on Fri 14 Mar 2025 04:25:35 AM EDT.
Package wl-clipboard-2.2.1-2.fc40.x86_64 is already installed.
Dependencies resolved.
=====
Package                Arch      Version              Repo                Size
=====
Installing:
dunst                  x86_64    1.12.1-1.fc40        updates             151 k
fontawesome4-fonts     noarch    1:4.7.0-22.fc40      fedora              204 k
fuzzel                 x86_64    1.11.1-2.fc40        updates            121 k
grim                   x86_64    1.4.1-3.fc40         fedora              27 k
kitty                  x86_64    0.39.1-1.fc40        updates            4.1 M
light                  x86_64    1.2.2-11.fc40        fedora              39 k
mpv                    x86_64    0.37.0-4.fc40        fedora             1.5 M
powerline-fonts        noarch    2.8.4-1.fc40         updates             13 k
slurp                  x86_64    1.5.0-2.fc40         fedora              27 k
swaybg                 x86_64    1.2.1-1.fc40         updates             24 k
swaylock               x86_64    1.7.2-3.fc40         fedora              41 k
waybar                 x86_64    0.11.0-1.fc40        updates            827 k
```

- Установка шрифтов

- Включение Copr-репозитория: `sudo dnf copr enable peterwu/iosevka`
- Установка шрифтов: `sudo dnf install iosevka-fonts iosevka-aile-fonts iosevka-curlly-fonts iosevka-slab-fonts iosevka-etoile-fonts iosevka-term-fonts`

```

root@localhost-live:~# sudo dnf copr enable peterwu/iosevka
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.
root@localhost-live:~#

```

```

root@localhost-live:~# sudo dnf install iosevka-fonts iosevka-aile-fonts iosevka
-curly-fonts iosevka-slab-fonts iosevka-etoile-fonts iosevka-term-fonts
Copr repo for iosevka owned by peterwu          12 kB/s | 29 kB      00:02
Dependencies resolved.
=====
Package
  Arch   Version      Repository                                     Size
=====
Installing:
iosevka-aile-fonts
  noarch 33.0.1-1.fc40 copr:copr.fedorainfracloud.org:peterwu:iosevka 48 M
iosevka-curly-fonts
  noarch 33.0.1-1.fc40 copr:copr.fedorainfracloud.org:peterwu:iosevka 94 M
iosevka-etoile-fonts
  noarch 33.0.1-1.fc40 copr:copr.fedorainfracloud.org:peterwu:iosevka 50 M
iosevka-fonts
  noarch 33.0.1-1.fc40 copr:copr.fedorainfracloud.org:peterwu:iosevka 94 M
iosevka-slab-fonts
  noarch 33.0.1-1.fc40 copr:copr.fedorainfracloud.org:peterwu:iosevka 97 M
iosevka-term-fonts
  noarch 33.0.1-1.fc40 copr:copr.fedorainfracloud.org:peterwu:iosevka 95 M

```

### 3 Выводы

Я понял и узнал

### 4 Контрольные вопросы