Лабораторная работа № 5

Операционные системы

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Информация

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Вводная часть

Настройка рабочей среды.

Актуальность

- Современные проекты требуют гибкой конфигурации, которая может изменяться в зависимости от среды разработки или выполнения. Использование chezmoi позволяет эффективно управлять конфигурациями на разных уровнях
- Безопасное хранение и обмен паролями – важная задача в сфере информационной безопасности. Утилиты pass и gopass предоставляют удобный и безопасный способ управления паролями

Объект и предмет исследования

- chezmoi
- pass
- gopass

Цели и задачи

Получение навыков работы с chezmoi, pass, gopass. Облегчение последующей работы с git.

Материалы и методы

- Процессор `pandoc` для входного формата Markdown
- Результирующие форматы
  - `pdf`
  - `html`
- Автоматизация процесса создания: `Makefile`

Установка pass и gopass

```
[avperegudov@fedora ~]$ sudo dnf install pass pass-otp
[sudo] password for avperegudov:
Last metadata expiration check: 0:26:50 ago on Tue 12 Mar 2024 03:39:33 PM MSK.
Package pass-1.7.4-8.fc39.noarch is already installed.
Package pass-otp-1.2.0-12.fc39.noarch is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[avperegudov@fedora ~]$ sudo dnf install gopass
Last metadata expiration check: 0:27:01 ago on Tue 12 Mar 2024 03:39:33 PM MSK.
Package gopass-1.15.2-2.fc38.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
```

Ключи gpg


```
[avperegudov@fedora os-intro]$ gpg --list-secret-keys
[keyboxd]
---------
sec   rsa4096 2024-03-02 [SC]
      2FB448FA496342C34A5436576B8D75421F02CF10
uid           [ultimate] Alexander <magister6239@gmail.com>
ssb   rsa4096 2024-03-02 [E]

sec   rsa4096 2024-03-02 [SC]
      85627557E200116436FB8197EE67EA8FEB3E7B12
uid           [ultimate] Alexander <magister6239@gmail.com>
ssb   rsa4096 2024-03-02 [E]

sec   rsa4096 2024-03-04 [SC]
      F79C8F2DB66D9D44A85C7FF27EB7C28FB05D3DDE
uid           [ultimate] Alexander <magister6239@gmail.com>
ssb   rsa4096 2024-03-04 [E]
```

Настройка

```
[avperegudov@fedora os-intro]$ sudo pass init magister6239@gmail.com
mkdir: created directory '/root/.password-store/'
Password store initialized for magister6239@gmail.com
[avperegudov@fedora os-intro]$
```

```
[avperegudov@fedora os-intro]$ sudo pass git init
Initialized empty Git repository in /root/.password-store/.git/
[master (root-commit) c355cbb] Add current contents of password store.
 1 file changed, 1 insertion(+)
 create mode 100644 .gpg-id
[master 62b707a] Configure git repository for gpg file diff.
 1 file changed, 1 insertion(+)
 create mode 100644 .gitattributes
[avperegudov@fedora os-intro]$
```

```
[avperegudov@fedora os-intro]$ sudo git remote add origin git@github.com:magister6239/for_lab.git
error: remote origin already exists.
```

```
[avperegudov@fedora os-intro]$ sudo pass git push
Everything up-to-date
```

Настройка интерфейса с броузером

```
[avperegudov@fedora os-intro]$ sudo 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.
```

```
[avperegudov@fedora os-intro]$ sudo dnf install browserpass
Copr repo for browserpass owned by maximbaz
Dependencies resolved.
========================================================================
 Package                        Architecture        Version
========================================================================
Installing:
 browserpass                    x86_64              3.1.0-1.fc39
Installing weak dependencies:
 browserpass-chromium           noarch              3.8.0-2.fc39
 browserpass-firefox            noarch              3.8.0-1.fc39

Transaction Summary
```

Сохранение пароля


```
[avperegudov@fedora os-intro]$ sudo pass insert file_for_key
Enter password for file_for_key:
Retype password for file_for_key:
[master 259f28f] Add given password for file_for_key to store.
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 file_for_key.gpg
[avperegudov@fedora os-intro]$
```

```
[avperegudov@fedora os-intro]$ sudo pass file_for_key
alexander
[avperegudov@fedora os-intro]$ sudo pass generate --in-place file_for_key
[master ac7b031] Replace generated password for file_for_key.
 1 file changed, 0 insertions(+), 0 deletions(-)
The generated password for file_for_key is:
u"#wYM3IH;3@8=k|{LKAk`aIm
[avperegudov@fedora os-intro]$ sudo pass file_for_key
u"#wYM3IH;3@8=k|{LKAk`aIm
[avperegudov@fedora os-intro]$
```

Дополнительное программное обеспечение

```
[avperegudov@fedora os-intro]$ sudo dnf -y install dunst fontawesome-fonts powerline-fonts light fuzzel swaylock kitty waybar swaybg wl-clipboard  mpv grim slurp
Last metadata expiration check: 0:19:22 ago on Tue 12 Mar 2024 05:02:50 PM MSK.
Package dunst-1.9.2-2.fc39.x86_64 is already installed.
Package fontawesome4-fonts-1.4.7.0-19.fc39.noarch is already installed.
Package powerline-fonts-2.8.3-14.fc39.noarch is already installed.
Package light-1.2.2-10.fc39.x86_64 is already installed.
Package fuzzel-1.9.2-2.fc39.x86_64 is already installed.
Package swaylock-1.7.2-2.fc39.x86_64 is already installed.
Package kitty-0.31.0-1.fc39.x86_64 is already installed.
Package waybar-0.9.24-1.fc39.x86_64 is already installed.
Package swaybg-1.2.0-3.fc39.x86_64 is already installed.
Package wl-clipboard-2.2.1-1.fc39.x86_64 is already installed.
Package mpv-0.36.0-3.fc39.x86_64 is already installed.
Package grim-1.4.1-1.fc39.x86_64 is already installed.
Package slurp-1.5.0-1.fc39.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
```

```
[avperegudov@fedora os-intro]$ 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.
```

```
[avperegudov@fedora os-intro]$ sudo dnf search iosevka
Last metadata expiration check: 0:20:21 ago on Tue 12 Mar 2024 05:02:50 PM MSK.
```

```
[avperegudov@fedora os-intro]$ 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                                          3.0 kB/s | 1.5 kB     00:00
Package iosevka-fonts-29.0.1-1.fc39.noarch is already installed.
Package iosevka-aile-fonts-29.0.1-1.fc39.noarch is already installed.
Package iosevka-curly-fonts-29.0.1-1.fc39.noarch is already installed.
Package iosevka-slab-fonts-29.0.1-1.fc39.noarch is already installed.
Package iosevka-etoile-fonts-29.0.1-1.fc39.noarch is already installed.
Package iosevka-term-fonts-29.0.1-1.fc39.noarch is already installed.
Dependencies resolved.
```

Установка


```
[avperegudov@fedora os-intro]$ sudo sh -c "$(wget -qO- chezmoi.io/get)"
info found version 2.47.1 for latest/linux/amd64
info installed ./bin/chezmoi
[avperegudov@fedora os-intro]$
```

Создание собственного репозитория с помощью утилит


```
[avperegudov@fedora os-intro]$ sudo gh repo create dotfiles --template="yamadharma/dotfiles-template" --private
✓ Created repository magister6239/dotfiles on GitHub
 https://github.com/magister6239/dotfiles
[avperegudov@fedora os-intro]$
```

Подключение репозитория к своей системе


```
[avperegudov@fedora os-intro]$ sudo chezmoi init git@github.com:magister6239/dotfiles.git
[sudo] password for avperegudov:
Sorry, try again.
[sudo] password for avperegudov:
Cloning into '/root/.local/share/chezmoi'...
remote: Enumerating objects: 100, done.
remote: Counting objects: 100% (100/100), done.
remote: Compressing objects: 100% (87/87), done.
remote: Total 100 (delta 0), reused 99 (delta 0), pack-reused 0
Receiving objects: 100% (100/100), 77.86 KiB | 699.00 KiB/s, done.
[avperegudov@fedora os-intro]$
```

```
[avperegudov@fedora os-intro]$ sudo chezmoi diff
```

```
[avperegudov@fedora os-intro]$ sudo chezmoi apply -v
```

Использование chezmoi на нескольких машинах


```
[avperegudov2@fedora os-intro]$ sudo chezmoi init git@github.com:magister6239/dotfiles.git
Cloning into '/root/.local/share/chezmoi'...
remote: Enumerating objects: 100, done.
remote: Counting objects: 100% (100/100), done.
remote: Compressing objects: 100% (87/87), done.
remote: Total 100 (delta 0), reused 99 (delta 0), pack-reused 0
Receiving objects: 100% (100/100), 77.86 KiB | 876.00 KiB/s, done.
[avperegudov2@fedora os-intro]$
```

```
[avperegudov2@fedora os-intro]$ sudo chezmoi diff
```

```
[avperegudov2@fedora os-intro]$ sudo chezmoi apply -v
```

Ежедневные операции с chezmoi


```
[avperegudov@fedora os-intro]$ sudo chezmoi update
Already up to date.
[avperegudov@fedora os-intro]$
```

```
[avperegudov@fedora os-intro]$ sudo chezmoi git pull -- --autostash --rebase && chezmoi diff
Already up to date.
```

```
[avperegudov@fedora os-intro]$ chezmoi apply
[avperegudov@fedora os-intro]$
```

Автоматическая фиксация и отправка изменений в репозиторий


```
mc [root@fedora]:~/.config/chezmoi
chezmoi.toml        [----] 21 L:[  1+ 4   5/  7] *(72 / 93b) 0010 0x00A
[data]
    email = 'magister6239@gmail.com'

[git]
    autoCommit = true
    autoPush = true
```