

# Операционные системы

Управление версиями

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3 сентября 2025

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## Цели и задачи работы

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Целью данной работы является изучение идеологии и применения средств контроля версий и освоение умений работать с git.

## Процесс выполнения лабораторной работы

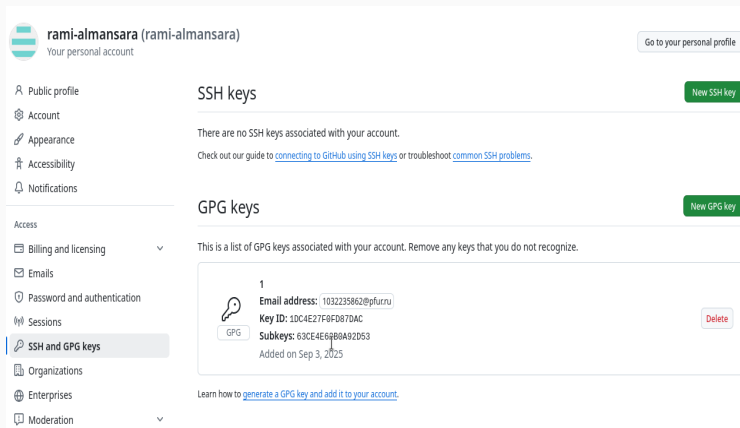
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## Глобальные параметры репозитория

```
ramialmansara@ramialmansara:~$  
ramialmansara@ramialmansara:~$  
ramialmansara@ramialmansara:~$ git config --global user.name "rami-almansara"  
ramialmansara@ramialmansara:~$ git config --global user.email "1032235862@pfur.ru"  
ramialmansara@ramialmansara:~$ git config --global core.quotepath false  
ramialmansara@ramialmansara:~$ git config --global init.defaultBranch master  
ramialmansara@ramialmansara:~$ git config --global core.autocrlf input  
ramialmansara@ramialmansara:~$ git config --global core.safecrlf warn  
ramialmansara@ramialmansara:~$
```

Рис. 1: Параметры репозитория

# Добавляем GPG ключ в аккаунт



The screenshot shows the GitHub account settings page for user **rami-almansara**. The left sidebar contains navigation links: Public profile, Account, Appearance, Accessibility, Notifications, Access, Billing and licensing, Emails, Password and authentication, Sessions, **SSH and GPG keys** (highlighted), Organizations, Enterprises, and Moderation. The main content area is titled **SSH keys** and **GPG keys**. The **SSH keys** section states there are no SSH keys associated with the account and provides a link to a guide on connecting to GitHub using SSH keys. The **GPG keys** section shows a list of GPG keys associated with the account. One key is listed with the following details: Email address: 1032235862@pfur.ru, Key ID: 1DC4E27F0FD87DAC, Subkeys: 63CE4E66B0A92D53, and Added on Sep 3, 2025. A **Delete** button is visible next to the key details. A link to learn how to generate a GPG key and add it to the account is also present.

**rami-almansara** (rami-almansara)  
Your personal account

Go to your personal profile

Public profile  
Account  
Appearance  
Accessibility  
Notifications

Access

Billing and licensing  
Emails  
Password and authentication  
Sessions  
**SSH and GPG keys**  
Organizations  
Enterprises  
Moderation

## SSH keys

New SSH key

There are no SSH keys associated with your account.


Check out our guide to [connecting to GitHub using SSH keys](#) or troubleshoot [common SSH problems](#).

## GPG keys

New GPG key

This is a list of GPG keys associated with your account. Remove any keys that you do not recognize.

1

 **Email address:** 1032235862@pfur.ru  
**Key ID:** 1DC4E27F0FD87DAC  
**Subkeys:** 63CE4E66B0A92D53  
Added on Sep 3, 2025

Delete

Learn how to [generate a GPG key and add it to your account](#).

Рис. 2: GPG ключ

```
ramialmansara@ramialmansara:~$  
ramialmansara@ramialmansara:~$ gpg --armor --export 1DC4E27F0FD87DAC | xclip -sel clip  
ramialmansara@ramialmansara:~$  
ramialmansara@ramialmansara:~$ git config --global user.signingkey 1DC4E27F0FD87DAC  
ramialmansara@ramialmansara:~$ git config --global commit.gpgsign true  
ramialmansara@ramialmansara:~$ git config --global gpg.program $(which gpg2)  
ramialmansara@ramialmansara:~$  
ramialmansara@ramialmansara:~$ gh auth login  
? Where do you use GitHub? GitHub.com  
? What is your preferred protocol for Git operations on this host? SSH  
? Upload your SSH public key to your GitHub account? /home/ramialmansara/.ssh/id_rsa.pub  
? Title for your SSH key: GitHub CLI  
? How would you like to authenticate GitHub CLI? Login with a web browser  
  
! First copy your one-time code: 55C9-8032  
Press Enter to open https://github.com/login/device in your browser...  
✓ Authentication complete.  
- gh config set -h github.com git_protocol ssh  
✓ Configured git protocol  
✓ Uploaded the SSH key to your GitHub account: /home/ramialmansara/.ssh/id_rsa.pub  
✓ Logged in as rami-almansara  
ramialmansara@ramialmansara:~$
```

Рис. 3: Связь репозитория с аккаунтом

```
ramialmansara@ramialmansara:~/work/study/2024-2025/Операционные системы$  
ramialmansara@ramialmansara:~/work/study/2024-2025/Операционные системы$  
ramialmansara@ramialmansara:~/work/study/2024-2025/Операционные системы$ cd ~/work/study/2024-2025/"Операционные с  
истемы"/os-intro  
ramialmansara@ramialmansara:~/work/study/2024-2025/Операционные системы/os-intro$ make COURSE=os-intro prepare  
ramialmansara@ramialmansara:~/work/study/2024-2025/Операционные системы/os-intro$ ls  
COURSE  LICENSE  package.json  presentation  README.en.md  README.md  
labs    Makefile  prepare       project-personal  README.git-flow.md  template  
ramialmansara@ramialmansara:~/work/study/2024-2025/Операционные системы/os-intro$
```

Рис. 4: Подготовка репозитория



## Выводы по проделанной работе

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Мы приобрели практические навыки работы с сервисом github.