



# How To Add and Delete Users on a CentOS 7 Server

Posted October 28, 2014 ©681.5k

LINUX BASICS

CENTOS

GETTING STARTED

By [Josh Barnett](#)

[Become an author](#)

## Introduction

When you first start using a fresh Linux server, adding and removing users is one of the most basic tasks that you should know how to do. When you create a new server, you are only given the `root` account by default. While this gives you a lot of power and flexibility, it is also dangerous to regularly use an account with so much power; for example, a `root` user is more vulnerable to security exploits, since any commands run under that account can affect the server's entire filesystem.

It is almost always a better idea to add an additional, unprivileged user to do common tasks. You should also create additional accounts for any other users that need access to your server. Each user should have an additional account so that their activities can be monitored and managed. You can still acquire administrative privileges, when needed, through a mechanism called `sudo`. In this guide, we will cover how to create user accounts, assign `sudo` privileges, and delete users on a CentOS 7 server.

---

## Adding Users

If you are signed in as the `root` user, you can create a new user at any time by typing:

```
adduser username
```

If you are signed in as a non-root user who has been given `sudo` privileges, as

Sign up for our newsletter. Get the latest tutorials on SysAdmin and open source topics.

✕ ing:

Sign Up

```
sudo adduser username
```

Next, you'll need to give your user a password so that they can log in. To do so, use the `passwd` command:

```
passwd username
```

**Note:** Remember to add `sudo` ahead of the command if you are signed in as a non-root user with `sudo` privileges.

You will be prompted to type in the password twice to confirm it. Now your new user is set up and ready for use! You can now log in as that user, using the password that you set up.

---

## Granting Sudo Privileges to a User

If your new user should have the ability to execute commands with `root` (administrative) privileges, you will need to give the new user access to `sudo`.

We can do this by adding the user to the `wheel` group (which gives `sudo` access to all of its members by default) through the `gpasswd` command. This is the safest and easiest way to manage `sudo` user rights.

If you are currently signed in as the `root` user, type:

```
gpasswd -a username wheel
```

If you are signed in using a non-root user with `sudo` privileges, type this instead:

```
sudo gpasswd -a username wheel
```

Now your new user is able to execute commands with administrative privileges. To do so, simply type `sudo` ahead of the command that you want to execute as an administrator:

Sign up for our newsletter. Get the latest tutorials on SysAdmin and open source topics.



Sign Up

You will be prompted to enter the password of the regular user account that you are signed in as. Once the correct password has been submitted, the command you entered will be executed with `root` privileges.

## Managing Users with Sudo Privileges

While you can add and remove users from a group (such as `wheel`) with `gpasswd`, the command doesn't have a way to show which users are members of a group. In order to see which users are part of the `wheel` group (and thus have `sudo` privileges by default), you can use the `lid` function. `lid` is normally used to show which groups a user belongs to, but with the `-g` flag, you can reverse it and show which users belong in a group:

```
sudo lid -g wheel
```

The output will show you the usernames and UIDs that are associated with the group. This is a good way of confirming that your previous commands were successful, and that the user has the privileges that they need.

---

## Deleting Users


If you have a user account that you no longer need, it's best to delete the old account. You have a couple of methods to do so, though the choice of which method to use depends on your own situation.

If you want to delete the user without deleting any of their files, type this command as `root`:

```
userdel username
```

If you want to delete the user's home directory along with the user account itself, type this command as `root`:

```
userdel -r username
```

Sign up for our newsletter. Get the latest tutorials on SysAdmin and open source topics. 

Sign Up

on-root

With either command, the user will automatically be removed from any groups that they were added to, including the `wheel` group if they were given `sudo` privileges. If you later add another user with the same name, they will have to be added to the `wheel` group again to gain `sudo` access.

---

## Conclusion

You should now have a good grasp on how to add and remove users from your CentOS 7 server. Effective user management will allow you to separate users and give them only the access that is needed for them to do their job. You can now move on to configuring your CentOS 7 server for whatever software you need, such as a [LAMP](#) or [LEMP](#) web stack.

For more information about how to configure `sudo`, check out our guide on [how to edit the sudoers file](#).

By [Josh Barnett](#)

Was this helpful?

Yes

No



[Report an issue](#)

---

## Related

TUTORIAL

TUTORIAL

Sign up for our newsletter. Get the latest tutorials on SysAdmin and open source topics.



Enter your email address

Sign Up

In this guide, we will show you three different ways of getting Node.js installed on a CentOS 8 server:

This guide will show you how to create a new user with sudo access on CentOS 8 without

#### BOOK

### Sysadmin eBook: Making Servers Work

This book is written with the belief that familiarity with some core areas of system administration will benefit everyone who uses

#### TUTORIAL

### How To Create a New Sudo-enabled User on Ubuntu 18.04 [Quickstart]

This guide will show you how to create a new user with `sudo` access on

## Still looking for an answer?



Ask a question



Search for more help

## 4 Comments

Sign up for our newsletter. Get the latest tutorials on SysAdmin and open source topics.



Sign Up

Leave a comment...

Sign In to Comment

^ [kostasmanionis](#) February 24, 2015

0 I get this when I try to use sudo with the created user :(

sudo: effective uid is not 0, is sudo installed setuid root?

I can see the user when I run `sudo lid -g wheel` and it has UID=1000

[Reply](#) [Report](#)

^ [daniellekwint](#) April 21, 2015

0 Thank you ! this was very helpful to resolve the issue that I had

[Reply](#) [Report](#)

^ [uxonith](#) June 3, 2015

0 This guide got me 90% of the way to adding a user with sudo privileges on the default CentOS 6.6 install. I know the article is for CentOS 7, but all I had to do to get my created user sudo access was:

```
visudo
...
## Allows people in group wheel to run all commands
%wheel  ALL=(ALL)          ALL <--- UNCOMMENT THIS LINE
```

[Reply](#) [Report](#)

^ [NicholasMeredith](#) July 12, 2015

0 Tiny nit-pick, but on CentOS systems ***adduser*** is just a symlink to ***useradd***:

Sign up for our newsletter. Get the latest tutorials on SysAdmin and open source topics. ✕

Enter your email address

Sign Up

And various Debian-based distros have a custom script for **adduser** which behaves entirely differently to **useradd**:

```
# file $(which adduser)
/usr/sbin/adduser: a /usr/bin/perl script, ASCII text executable
```

So I always try and use **useradd** to keep things as consistent as possible, does anybody else find the same thing?

[Reply](#) [Report](#)



This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.



#### BECOME A CONTRIBUTOR

You get paid; we donate to tech nonprofits.



Sign up for our newsletter. Get the latest tutorials on SysAdmin and open source topics. ✕

Sign Up

**GET OUR BIWEEKLY NEWSLETTER**

Sign up for Infrastructure as a  
Newsletter.

**COVID-19 SUPPORT PROGRAM**

Working on something related  
to COVID-19? DigitalOcean  
would like to help.

[Featured on Community](#) [Kubernetes Course](#) [Learn Python 3](#) [Machine Learning in Python](#)  
[Getting started with Go](#) [Intro to Kubernetes](#)

[DigitalOcean Products](#) [Droplets](#) [Managed Databases](#) [Managed Kubernetes](#) [Spaces Object Storage](#)  
[Marketplace](#)

## Welcome to the developer cloud

DigitalOcean makes it simple to launch in the cloud and scale up as you grow – whether you're running one virtual machine or ten thousand.

[Learn More](#)

Sign up for our newsletter. Get the latest tutorials on SysAdmin and open source topics.



**Sign Up**





© 2020 DigitalOcean, LLC. All rights reserved.

Company

- About
- Leadership
- Blog
- Careers
- Partners
- Referral Program
- Press
- Legal & Security

Products

- Products Overview
- Pricing
- Droplets
- Kubernetes
- Managed Databases
- Spaces
- Marketplace
- Load Balancers
- Block Storage
- Tools & Integrations
- API
- Documentation
- Release Notes

Community

- Tutorials
- Q&A
- Tools and Integrations
- Tags
- Product Ideas
- Meetups
- Write for DOnations
- Droplets for Demos
- Hatch Startup Program
- Shop Swag
- Research Program
- Open Source
- Code of Conduct

Contact

- Get Support
- Trouble Signing In?
- Sales
- Report Abuse
- System Status

Sign up for our newsletter. Get the latest tutorials on SysAdmin and open source topics.



Enter your email address

Sign Up