

How to Become Linux System Administrator

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Co-authored by [Garnik Ovsepyan](#) , [Jennifer Mueller, JD](#) , and **3 contributors**

Last Updated: July 27, 2021

Linux system administrators do well as computer professionals. They're sought-after and can earn six-figure incomes. But if there's no dedicated college major or training program, how do you become one? Many Linux system administrators come into their profession by accident, after years of learning how to use Linux as part of another computer-related job. If you want a more efficient path to becoming a Linux system administrator, use certification programs and criteria to help guide your education and training in the operating system.[1]

Method 1

Method 1 of 2: Starting Out with Linux



1 Earn a bachelor's degree in computer science. Unlike some other operating systems, you can't go to college to be a Linux system administrator. However, if it's within your means to do so, getting a degree in computer science will give you a strong foundation to start from as you learn Linux.[2]

- Going to school also gives you the opportunity to do internships and build a professional network.
- If a bachelor's degree is out of reach for you right now, there are still plenty of online courses you can take for free that will teach you some basics about computer hardware and software.[3]



- 2 Take the free LFS101x Introduction to Linux course.** The LFS101x course gets you started installing and setting up Linux, as well as teaching you the day-to-day tasks system administrators complete in the Linux environment. This course allows you to more easily navigate Linux so you have a solid working understanding of the operating system.^[4]
- While you don't need any experience in Linux to excel at this course, you should still be an experienced computer user. If you don't have a lot of knowledge of other operating systems, start there before moving to Linux.



- 3 Use other Linux Foundation courses to expand your knowledge.** The Linux Foundation offers a number of other courses to help train you as a Linux system administrator. However, only the intro course is free. If you feel like you got a lot out of that course, though, it's worth looking into the additional courses.^[5]
- The Linux Foundation's certification is based on the material in the LFS101x and the LFS201 courses, so you should plan on at least taking the 201 course if you intend to get certified. It'll only set you back a few hundred dollars.
 - If you can't afford to pay for a course, the Linux Foundation also has free videos and other resources on its website that can help you grow with Linux.



STEP 4

Practice doing different things in the Linux environment.

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4 Practice doing different things in the Linux environment. As the saying goes, practice makes perfect. While you can spend thousands of dollars on courses that will teach you different aspects of Linux system administration, you can also learn the same things through trial and error just by playing around on your machine at home.[6]

- Look at the areas you would be tested on for certification and focus on those. Supplement them with any other areas that are of interest to you.



STEP 5

Read through the included documentation when you get stuck.

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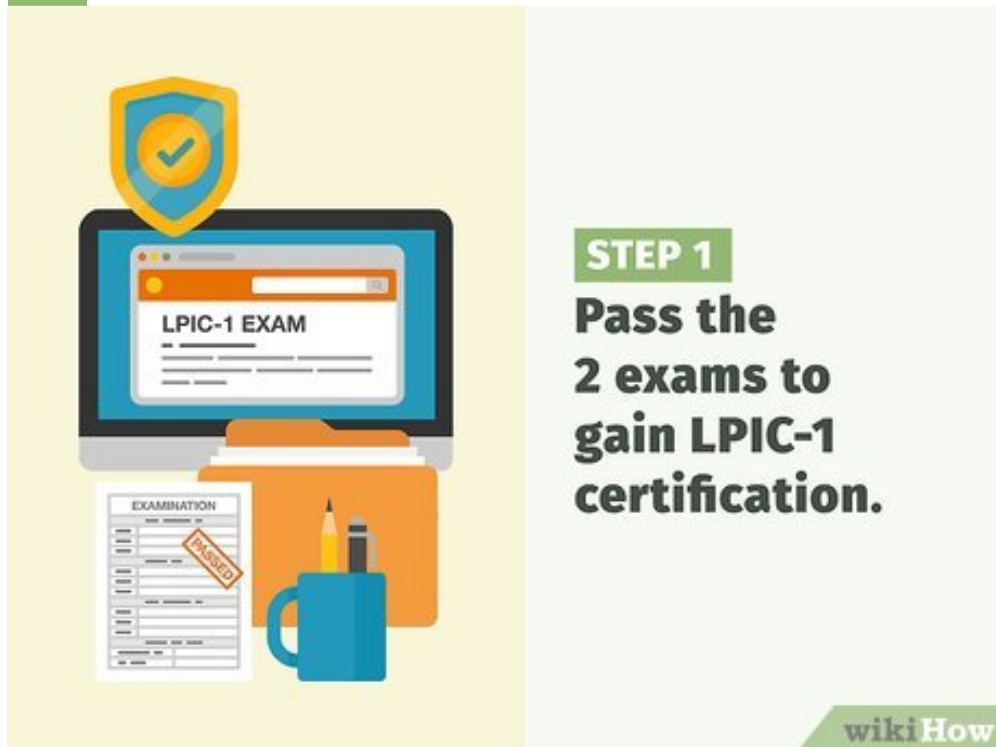
5 Read through the included documentation when you get stuck. Linux comes with built-in documentation that might be able to get you out of a jam. Use the commands "man" (for manual), "info," or "help" to access the built-in documentation.[7]

- Even if you figure out how to do something on your own, it's still worthwhile to go back and look at the documentation. There might be a more efficient way that you overlooked.



6 Join Linux user groups for help and support as you learn. Search online for Linux user groups and forums. There, you'll find other Linux users at all levels of experience who are willing to help you grow and learn.[8]

- The Linux Foundation has training forums on its website. There's also a Linux Admin subreddit where you can talk to other Linux users.
- Search on the internet, through your local university, or on a website such as meetup.com for a local Linux Users Group (LUG). You'll meet people of different ages and experience levels in your area who can not only provide you with advice and support but also help network when you're looking for a job.



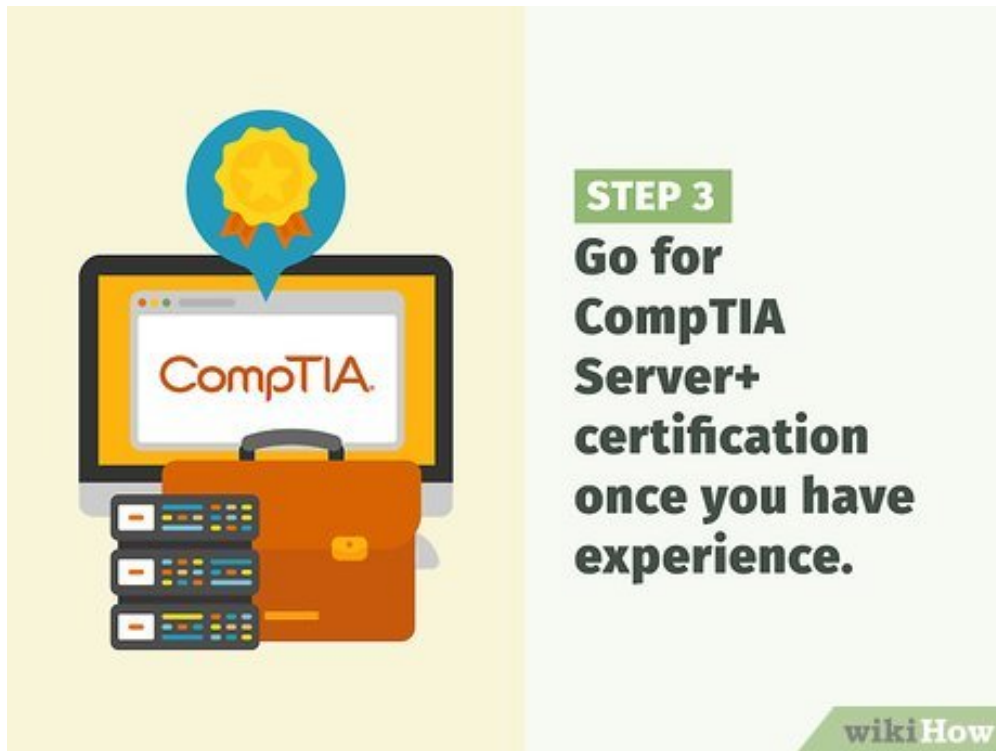
1 Pass the 2 exams to gain LPIC-1 certification. Go to the Linux Professional Institute website to sign up for the LPIC-1 exams. The cost for the exam differs depending on the country you live in, but you can generally expect to pay the equivalent of a few hundred dollars US. The exam is available online in English and Japanese, or in live testing centers in English, German, Brazilian Portuguese, Simplified Chinese, Traditional Chinese, and Spanish. The two exams test your ability to:^[9]

- Understand Linux system architecture
- Install and maintain a Linux workstation and network client setup
- Make common GNU and Unix commands
- Handle system security and file access permissions
- Perform common maintenance tasks, including backup, restore, shutdown, and reboot



2 Take the exam to become a Microsoft Certified Solutions Expert (MCSE). The MCSE exam is a 2-hour multiple-choice test that costs less than US \$200 to take. There are many preparation and training courses available that will make this exam a breeze.^[10]

- Even though your focus is on Linux, many Linux systems exist in a Microsoft framework. Having demonstrated knowledge of the Windows OS increases your attractiveness as a job candidate.^[11]
- MCSE is the highest Microsoft credential and builds on the skills of the Microsoft Certified Solutions Associate (MCSA) certification, so you'd need to take that first.



3 Go for CompTIA Server+ certification once you have experience. Before you can take the exam to qualify for this certification, you need 18 to 24 months of professional experience working with server hardware and software. While the course itself is intense, you only need to pass a single 90-minute long exam to become certified.^[12]

- The exam costs around US \$300 and consists of 100 multiple-choice questions. To pass this test, you must demonstrate that you've mastered the concepts of virtualization, storage, security, and troubleshooting.
- This certificate doesn't expire, so it's a good one to have.



4 Add Red Hat certification after you've worked as a system administrator. The 2 Red Hat certifications cost around US \$400 each and are performance-based practical exams. While experience isn't required, 12-36 months of system administrator experience are recommended.^[13]

- The Red Hat Certified System Administrator (RHCSA) credential is a lower-level certification and validates that you have the core skills necessary to be a Linux system administrator. After that, you can go for the Red Hat Certified Engineer (RHCE) certification.
- Training courses are available, but they don't come cheap. Expect to pay at least \$3,400 for a 4-5 day training course.



Expert Q&A

Question

Which courses are best for a Linux system administrator?



Garnik Ovsepyan

Computer
Specialist
Expert Answer

Enroll in some C++ courses at your local community college. It helps to have some background in Microsoft C++, so you have a bit of basic and advanced knowledge of the Windows and Microsoft server environment.

Helpful ☐ 0 Not Helpful ☐ 0



Tips

- If you're planning on working for a corporation, keep your knowledge of other operating systems up to date. Frequently, you'll be operating in an environment that uses multiple operating systems and you'll need to understand how they all work together. ^[14]

References

1. ↑ <https://www.redhat.com/sysadmin/life-linux-system-administrator>
2. ↑ <https://blog.netwrix.com/2018/07/20/how-to-become-a-system-administrator-five-steps/>
3. ↑ Garnik Ovsepyan. Computer Specialist. Expert Interview. 1 July 2021.
4. ↑ <https://www.linuxfoundation.org/blog/7-steps-to-start-your-linux-sysadmin-career/>
5. ↑ <https://www.linuxfoundation.org/blog/7-steps-to-start-your-linux-sysadmin-career/>
6. ↑ <https://www.ubuntupit.com/things-to-know-for-becoming-a-successful-linux-system-administrator/>
7. ↑ <https://www.linuxfoundation.org/blog/7-steps-to-start-your-linux-sysadmin-career/>
8. ↑ <https://www.linuxfoundation.org/blog/7-steps-to-start-your-linux-sysadmin-career/>
9. ↑ <https://www.lpi.org/our-certifications/lpic-1-overview>
10. ↑ <https://blog.netwrix.com/2018/07/19/best-system-administrator-certifications-for-2018/>
11. ↑ Garnik Ovsepyan. Computer Specialist. Expert Interview. 1 July 2021.
12. ↑ <https://blog.netwrix.com/2018/07/19/best-system-administrator-certifications-for-2018/>
13. ↑ <https://blog.netwrix.com/2018/07/19/best-system-administrator-certifications-for-2018/>
14. ↑ <https://www.redhat.com/sysadmin/life-linux-system-administrator>

About This Article



Co-authored by:
Garnik Ovsepyan
Computer Specialist

This article was co-authored by [Garnik Ovsepyan](#) and by wikiHow staff writer, [Jennifer Mueller, JD](#). Garnik Ovsepyan is a Computer Specialist and the Owner of HeliX PC based in Burbank, California. With over 25 years of experience, Garnik specializes in custom computer builds, computer repairs, virus removal, computer tune-ups, hardware and software troubleshooting and installations, diagnostics, and data backup and recovery. This article has been viewed 2,389 times.

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Co-authors: **3**
Updated: **July 27, 2021**
Views: **2,389**

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