



# A Brief Guide to Starting Your Career as a Linux Sysadmin

[www.linuxfoundation.org](http://www.linuxfoundation.org)

# Why Linux?

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You may not realize it, but Linux is everywhere. It's most likely in the car you drive, the TV you watch, the smartphone you talk on, and maybe even the refrigerator you store your food in! It powers almost all of the websites you visit, and it's behind virtually all the special effects you see in summer blockbusters. In short, Linux is ubiquitous. And it's only becoming more and more common.

What does this mean for you? Well, along with Linux's rise to prominence, there is a corresponding demand for Linux talent. For example, if you go to Dice.com (a popular technology job recruiting site) you can find almost 50,000 jobs requiring Linux system administration skills. You can see, there are a huge number of jobs available for those with the proper skills.

But that's not all. Because Linux talent is so in-demand, employers are having a hard time finding and keeping qualified sysadmins. As a result, employers are offering all kinds of perks to the right candidates and employees. Some of these benefits include:

- The ability to work remotely or from a home office
- Substantial flexibility with work hours
- Higher starting salary
- Bigger raises
- Job security
- Free training and certifications
- And more!

The benefits are amazing and almost universal. In fact, in a recent survey of Linux professionals, a whopping 90% stated that they felt that knowing Linux had advanced their careers.

One of the best things about working with Linux, however, is that you can have a career doing something you love. That same survey found that 75% of respondents considered Linux to be not just a job, but a lifetime passion. Now that's job satisfaction!

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# What Does A Linux Sysadmin Do?

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At this point you may be asking yourself what a career as a Linux sysadmin entails. That's actually harder to describe than you might think, because Linux system administrators have highly varied and interesting jobs. But for example's sake, here are a few of the tasks a Linux sysadmin might perform:

- Managing all the filesystems for the organization
- Managing and providing support to users
- Ensuring that Linux systems are secure and protected from hacks and bugs
- Optimizing Linux installs for better performance
- Troubleshooting a wide variety of issues.

But perhaps a better way to learn about what a sysadmin does is to hear from actual sysadmins. We've created a series of interviews on Linux.com with some of our system administrators here at The Linux Foundation. They talk about why they got into Linux, their favorite aspects of their jobs, and what their daily duties entail. You can click through to find the interviews here:

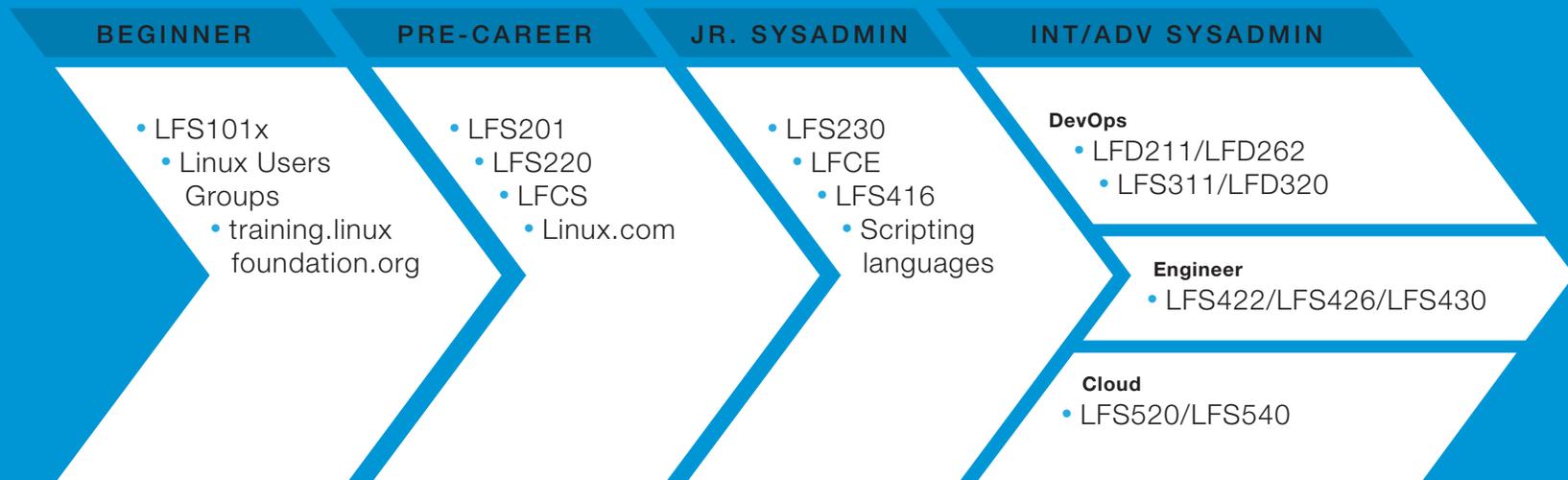
- [Linux Foundation SysAdmin Clint Savage Reminisces on Weeklong Hackfest](#)
- [Linux Foundation SysAdmin Konstantin Ryabitsev, an SELinux Expert](#)
- [Linux Foundation SysAdmin Michael Halstead's IT Career Started at Age 15](#)
- [Linux Foundation SysAdmin Andy Grimberg Loves New Tech and Snowboarding](#)
- [To Linux Foundation SysAdmin Ryan Day, Elegance is the Best Tool](#)
- [Linux Foundation SysAdmin Eric Searcy Lives By Regex.](#)

# The Linux Foundation Sysadmin Training System

When you first look at the path to becoming a professional Linux sysadmin, it can be daunting. The mission of The Linux Foundation is “to preserve and protect Linux.” One of the ways in which we do this is by providing training to help ensure that there is enough Linux talent to sustain Linux’s growth. As a result, we’ve created an entire ecosystem designed to help you become a Linux expert - regardless of your current experience level.

You’ll find Linux Foundation courses (denoted by a course number such as LFS201) for every stage in your career, as well as two professional certifications (LFCS and LFCE) for more advanced sysadmins.

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# How Do I Get Started?

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It should almost go without saying, but **the first key to learning Linux is to install Linux**. Both the LFS101x and the LFS201 courses include detailed sections on installing and configuring Linux for the first time.

If you are completely new to Linux, the best place to start is our free LFS101x Introduction to Linux course. This online course is hosted by edX.org, and explores the various tools and techniques commonly used by Linux system administrators and end users to achieve their day-to-day work in a Linux environment. It is designed for experienced computer users who have limited or no previous exposure to Linux, whether they are working in an individual or enterprise environment. This course will give you a good working knowledge of Linux from both a graphical and command line perspective, allowing you to easily navigate through any of the major Linux distributions.

Once you've completed LFS101x, you're ready to start diving into the more complicated tasks in Linux that will be required of you as a professional sysadmin. To gain those skills, you'll need to take LFS201 Essentials of Linux System Administration. The course gives you in-depth explanations and instructions for each topic, along with plenty of exercises and labs to help you get real, hands-on experience with the subject matter.

If you would rather have a live instructor teach you or you have an employer who is interested in helping you become a Linux sysadmin, you might also be interested in LFS220 Linux System Administration. This course includes all the same topics as the LFS201 course, but is taught by an expert instructor who can guide you through the labs and answer any questions you have on the topics covered in the course.

Practice makes perfect, and that's as true for Linux as it is for any musical instrument or sport. Once you've installed Linux, use it regularly. Perform key tasks over and over again until you can do them easily without reference material. Learn the ins and outs of the command line as well as the GUI. This practice will ensure that you've got the skills and knowledge to be successful as a professional Linux sysadmin.

## Why should you get a Linux Foundation certification?



### From the source

The Linux Foundation is the home of Linux creator Linus Torvalds and other top Linux contributors. We provide services and protection to ensure that Linux stays a free, open-source resource for the world. Nobody knows Linux better.



### Performance-based

You get to show your skills, not just what you've memorized. Employers tend to prefer these types of certifications.



### Distribution-flexible

You don't have to get tied down to one distribution or another, which gives you more freedom when looking for jobs.



### Online

You can take this exam on your own computer from your own home.

After you've taken LFS201 or LFS220 and you've gotten some practice, you are now ready to get certified as a system administrator. You'll need this certification because this is how you will prove to employers that you have the necessary skills to be a professional Linux sysadmin.

There are several Linux certifications on the market today, and all of them have their place. However, most of these certifications are either centered on a specific distro (like Red Hat) or are purely knowledge-based and don't demonstrate actual skill with Linux. The Linux Foundation Certified System Administrator certification is an excellent alternative for someone looking for a flexible, meaningful entry-level certification.

At this point you may also want to consider joining up with a local Linux Users Group (or LUG), if there's one in your area. These groups are usually composed of people of all ages and experience levels, so regardless of where you are at with your Linux experience, you can find people with similar skill levels to bond with, or more advanced Linux users who can help answer questions and point you towards helpful resources. To find out if there's a LUG near you, try looking on meetup.com, check with a nearby university, or just do a simple Internet search.

### Pro Tip:

Save some money and purchase LFS201 and the LFCS exam as a bundle.

The bundle is normally \$499, but if you use the coupon code **CAREERGUIDE**, you'll get an additional \$100 off the bundle price!

There are also many online communities available to you as you learn Linux. These sites and communities provide help and support to both individuals new to Linux or experienced administrators:

- [Linux Admin subreddit](#)
- [Linux.com](#)
- [training.linuxfoundation.org](#)
- <http://community.ubuntu.com/help-information/>
- <https://forums.opensuse.org/forum.php>
- <http://wiki.centos.org/Documentation>

Last but not least, if you ever get stuck on something within Linux, don't forget about Linux's included documentation. Using the commands **man** (for manual), **info** and **help**, you can find information on virtually every aspect of Linux, right from within the operating system. The usefulness of these built-in resources cannot be overstated, and you'll find yourself using them throughout your career, so you might as well get familiar with them early on.

# How To Get Your First Linux Job

## The Search

Once you're certified, you can start the job hunt! There are many sites and resources to help with this part of the process. Some job sites that we recommend include:

- [dice.com](http://dice.com)
- Job board on Linux.com (<http://jobs.linux.com/>)
- LinkedIn Linux groups and LinkedIn job search.

When you search these sites, look for keywords like **“junior linux sysadmin.”**

Another valuable source of job leads could be **your local Linux Users Group**. Attend regularly, get to know the members of the group, and often they will know of (and can recommend you for) entry-level positions that might be available.

Also, make sure to include a brief list of your Linux competencies and your LFCS certification on your resume or CV.

When you search these sites, look for keywords like **“junior linux sysadmin.”**

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## The Interview

Everyone knows the importance of a first impression, and an interview is no exception to that rule. Whether or not your interview has a positive outcome may very well be determined within the first few minutes you meet with members of the company's team. Therefore, it can not be stressed enough that you must put the time and effort into being as best prepared as possible. In order to accomplish that, make sure you have a simple checklist and go through each of these steps. They are as follows:

- Do your best to get a list of the people you will be meeting with.
- Know the dress code to make sure you blend in as well as possible.
- Know the company location.
- Make sure you know the details of the position you will be interviewing for.
- Try to get an itinerary for the interview along with a list of people you will be meeting with.
- Be up-to-date on the company.

These do not have to be completed in any particular order, but each has a high level of importance.

Prior to the interview, ask the company who you will be meeting with. Sometimes the company will not oblige with your request, but most often they will. This is a potential key to your success on interview day. With the tools that are available today at your disposal, you should be able to research each team member's background.

A good place to start is with your social network tool of choice (LinkedIn, Facebook, etc.). By locating each individual, you should be able to get an idea of their background and perhaps get clues into their technical strengths. By doing this, you should hopefully be able to find some similarities with a few, if not all, of the team members. Whether you grew up in the same area as a team member or have the same interest in a particular open source project, this will benefit you greatly. People who can carry a conversation and find likenesses with one another tend to do extraordinarily well on interview day.



Knowing the dress code of the company is a subtle reminder of a detail that more often than not is taken for granted. A number of people might consider it to be a minor detail, but it still carries a high level of importance. Believe it or not, a person may not be considered for a position solely based on their dress, even though they display the necessary skill set. Thus, do not let something that is so easy to overcome be a detriment to you on interview day. More often than not, in the technology space, business casual seems to be the norm. But, it never hurts to ask. Rarely is a group more formal than that, but there are times when they are more casual. Nonetheless, even if you are dressed business casual and the rest of the team is in shorts and flip flops, you are going to be OK. Just do not bring out the suit in that instance. You will be looked at as too stiff for their group. On the flip side, don't show up in shorts and flip flops with the rest of the team being business casual; they will take your dress as a sign of lack of respect for their company. At the end of the day, play it safe.

Know where you are going to be heading on interview day. It is another detail that sometimes gets overlooked to the candidate's demise. It is important that you know how long it is going to take you to get to their location. Everyone is aware of the possibility of a car accident or some other traffic situation that makes you late. Just make sure you take the company's phone number with you. If you happen to run into traffic, call the company and notify them.

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There is nothing worse than a team sitting around waiting for you, and you not showing up on time unannounced. Also, make sure you have the right location. You never know when your interview might be at a satellite office that is not listed on their website.

It is also important to know the details of the position you are interviewing for. This will assist in your preparation. If you're new to Linux, be prepared to explain how your certification is a good substitute for a computer degree or a couple of years of experience. Knowing exactly what they are looking for will only assist you in a successful interview.

If possible, get an itinerary for your interview. Most companies will accommodate you with this request, so do not hesitate to ask. There are several reasons why this is so important. First of all, you will know how much of your time is expected during the interview in the event you are planning other activities that day. Secondly, if it is a lengthy interview, you will be able to see if the company is allocating any time for a lunch break. Thus, you are able to make sure you have had a meal beforehand in the event there are no breaks during the interview. Lastly, an itinerary allows you to know how long you will be meeting with each individual, and perhaps if you will be meeting with one individual more than once. That way, you should not come across any surprises during your interview, and it should flow accordingly.

Also, make sure to do your research on the company. This seems like a no brainer, but you would be amazed at how many people forget to spend some time looking at the company. There are so many avenues these days to get information on a company, so please utilize them. Do not just be satisfied with knowing their business, but also look up any news items about the company over the last couple of months. That will give you an idea of where they are headed as an organization. Being able to ask relevant questions revolving around their business model only enhances your chance of a positive meeting.

Preparation is the key to a successful interview. By following these steps, you will improve your chance of landing the open position. All of the items discussed are fairly fundamental, but as mentioned, each holds a high level of importance. By discarding any one of them, you will inhibit this opportunity. Interviews are tough enough during the actual process. Everybody has an equal chance prior to the interview, so make sure you are as prepared as the rest of your competition.

# Advancing Your Linux Career



So now you're a sysadmin. What's next? Fortunately, there's still plenty of opportunity ahead of you, and plenty of ways to get there.

## Continue Learning

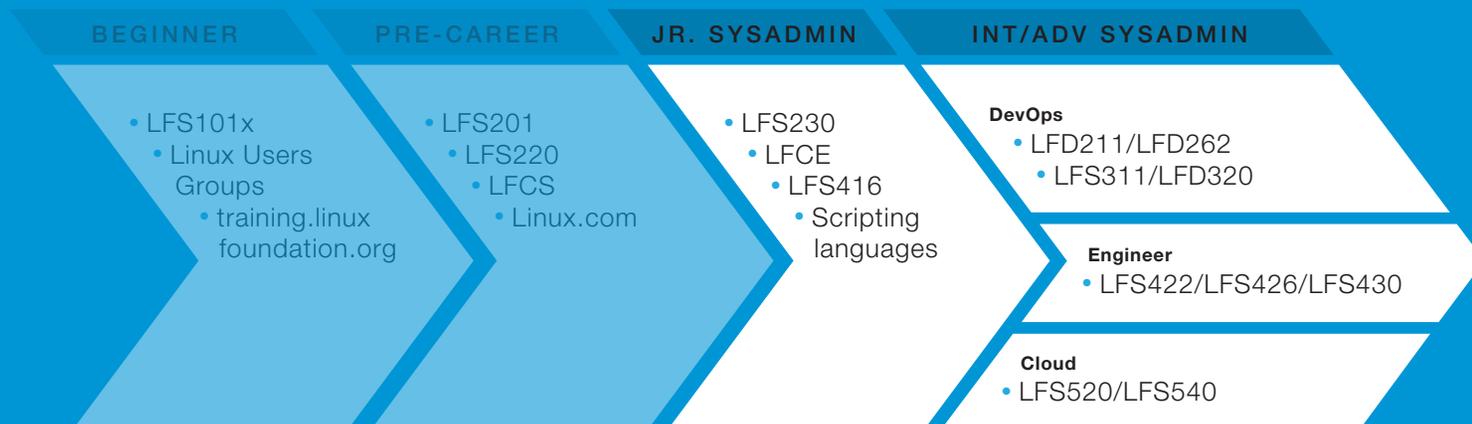
One of the things that makes a career in Linux so rewarding is that you have an opportunity to keep learning new and exciting things that keep the job fresh. In fact, if you don't keep studying and learning new things, you may find yourself getting left behind! Fortunately, there are plenty of resources available to help you stay up on the latest Linux trends and technologies.

## Additional Training

You may be a junior sysadmin right now, but that's just the beginning of your Linux career. Once you've got that first job, you have a few different options.

The Linux Foundation has classes that cover the entire span of Linux sysadmin experience. No matter what direction you want to take your career, we have a course that will give you the knowledge that you need to get there.

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## Books

A good way to get a better handle on Linux is to pick up an appropriate book. You can find books on almost every subject relating to Linux. We've included a handful of highly recommended books that will help you get started, but don't stop there - there's an entire universe of published knowledge out there that you should definitely become familiar with.

- [The Linux Bible](#)
- [The Linux Command Line: A Complete Introduction](#)
- [The Practice of System and Network Administration](#)
- [Systems Engineering and Analysis](#)
- [Pretty much anything from O'Reilly Media](#)



## Web/Email

As mentioned earlier in this guide, there are plenty of online resources and communities available to you as a Linux professional. As you progress in your Linux knowledge, you'll probably find yourself gravitating to particular communities and sites online. This is good because it probably means you're finding more information and help that is interesting to you and you're becoming more specialized. However, you'll still want to continue to check major Linux news sites like Linux.com to get a sense for what's going on in the wider sphere of Linux - you never know when a new topic or opportunity might arise!



## Become an Early Adopter

Going along with the theme of staying up on the latest news about Linux via the web, the enterprise Linux environment is changing rapidly and new technologies are being introduced all the time. KVM, OpenStack, Docker, and other technologies are revolutionizing enterprise computing, and sysadmins who are willing to educate themselves on these new technologies and become proficient in them will see tremendous opportunities.



## Get Involved

We've mentioned Linux User Groups several times in this guide, which should underscore the importance of taking advantage of the amazing community that Linux has developed around itself. The benefits you'll experience as you both receive help and later on as you provide help to other people who are learning about Linux for the first time can not be overstated.

Another way to get involved as you become more experienced is to participate in open source infrastructure projects. These projects bring together volunteers and professionals who help manage servers for open source projects, build tools and utilities, and create new applications to make open source development a smoother process. Here are a some links to a few of these projects:

- Debian: [dsa.debian.org](https://dsa.debian.org)
- Fedora: [fedoraproject.org/wiki/Infrastructure](https://fedoraproject.org/wiki/Infrastructure)
- Mozilla: [wiki.mozilla.org/ReleaseEngineering/PuppetAgain](https://wiki.mozilla.org/ReleaseEngineering/PuppetAgain)
- Jenkins: [jenkins-ci.org/content/come-join-infra-team](https://jenkins-ci.org/content/come-join-infra-team)
- OpenStack: [ci.openstack.org](https://ci.openstack.org).

You can also join the Linux Foundation as an individual member. As a Linux Foundation member, you receive discounts on training, certification, hardware, and more. If you use even one or two discounts, you will have more than paid for your membership and you will also be helping support the mission of the Linux Foundation to promote and protect Linux.



## Events

The Linux community puts on a variety of events throughout the year, from small regional shows like Texas LinuxFest to large international shows like LinuxCon North America and Europe. These events are a great opportunity to hear from the leaders of the Linux community, learn about new ideas, trends, and tools, and network with other people like you! At some Linux Foundation events we also hold Linux bootcamps where experienced Linux instructors will show you how to install and use Linux and answer any questions that you might have.

# Conclusion

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Working with Linux can be a doorway to a fulfilling and satisfying career. We hope this guide is helpful and gives you some direction as you plan your future.

And remember: Whether you need additional training, or just some free resources and tutorials to help you with a specific topic, The Linux Foundation has all the information you need. Our goal is to help you succeed with Linux.

Happy learning!



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