



ABC IT Education

WE'LL TAKE YOU FROM ZERO TO HERO IN A SNAP



Linux Systems Administration

Linux System Administration Overview

- Before we start getting into the details of the Linux operating system as well as how to use and manage Linux systems, I want to give you an overview of the topics will be covering in this course.
- In the first section of the course we're going to focus on Linux fundamentals and lay down a strong foundation of understanding before we move on to advanced concepts. You'll start out by learning what Linux is, what a Linux distribution is and how to choose the right one.
- You'll also learn how to get access to a Linux system as well as a couple of different methods for installing Linux. From there, we'll talk about the Linux file system hierarchy and what sets it apart from other operating systems.

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- Then, you'll be ready to start working at the command line. Here you'll learn how to easily navigate Linux from the command line and how to create and manage files and directories.
- This leads to the important topic of Linux permissions. This is one of the hardest concepts for those new to Linux to grasp, but I'm going to really break down this topic and simplify it.
- I'll also share with you a couple of quick shortcuts that will make this complex topic really click for you.
- We'll keep working on command line skills by talking about ways to customize your command line environment and how to create shortcuts called aliases.

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- You'll learn how to get help and find the documentation you need to make the most out of the command line. You'll also learn how to search for and find data on a Linux system, whether it be by name or by the contents of files.
- We'll get into some advanced concepts that really demonstrate the power of the Linux command line. You'll learn all about input, output, redirection, and command pipelining.
- Next we'll be covering users and groups. We'll talk about the various types of users found on a Linux system and a very special user known as the super user.
- You'll learn how to share files and directories with others. How to manage users and groups. And we'll even talk about switching users, running processes as others, as well as when and why to do that.

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- The later sections of the course deal with Linux system administration techniques. In this part of the course you'll learn all about the Linux boot process. You'll learn where to find log files generated by Linux and how to use those to troubleshoot problems. We'll also talk about managing disks and file systems.
- Of course, you'll learn about how to install applications and manage software too.
- Next, we'll cover networking concepts that apply to Linux administration and specifically how to configure network interfaces. You'll also learn how to transfer files over the network and in between systems.
- Finally we'll talk about ways to automate tasks on Linux servers.

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- ▶ You'll learn about process and job management. How to schedule and automate jobs.
- ▶ Finally, you'll be taught shell scripting so you can simplify complex tasks.
- ▶ You'll learn even more along the way. I know that it sounds like a lot of material to cover, and frankly it is. But the good news is that we're going to start at the beginning and take this journey together step by step.
- ▶ Though there may be changes along the way, I've designed this course so that each lesson builds upon the previous one. So, by the time you reach the end you'll fully understand all the things we talked about here today.