DevOps - Module 3: Linux For DevOps

DevOps

Module 3: Linux For DevOps

Video: Linux For DevOps

Need to consider learning Linux before going into DevOps.
The first thing it says, Rick Linux is the foundation
for most of the modern infrastructures.
So you're working with all the cloud platform, right?
Like AWS, Azure, GCP, all the major cloud vendors.
Right now, all their servers mostly run on Linux.
And the tools that I discussed, like containers,
when it comes to Docker, Kubernetes,
and other tools like Ansible,
their primary underlying operating system is Linux.
So this way, what you'll also be able
to understand in the future when working with these tools,
you'll have the troubleshooting abilities, right?
And as well as another reason why you need to often look
for this part is open source nature.
Linux is free and open source,
making it widely adopted in
enterprise for, like I said, right?
There are paid versions also,
but technically whatever the Ubuntu flavor, Amazon linex,
uh, what you say, suse, openSUSE, we call it, these are all
what you say, open distributions.
You can go ahead and you can start using without paying
any charges, right?
And along with it performance

and as well as stability,
You see, yes, Linex is very lightweight compared to Windows
and stable and as well as efficient, which makes it,
what an ideal choice for hosting
production environments in the future.
This is also one of the primary reasons why we are going in
relying on it, okay?
And along with it, like I said, right?
Most of the DevOps tools are built for Linux actually.
Like the tools like Jenkins, Docker, Kubernetes,
hands Built Terraform, these are all designed
with Linux invite.
So understanding Linux helps managing those
tools more effective.
So now I hope you are clear why we are learning.
These are like few of the primary, uh, factors you need
to consider when you're going
and start working with respect to Linux right now.
And like I said, now it's not like I want
to be a Linux administrator or something,
but the basic things that you need to be aware of,
I'll just do that
When I said we are hosting the production servers, right?
Uh, this is what the primary part is
that server management is going to be done via Linux.
So most production servers are already what Linux based.
So you need to know how to interact with,
when I say interact, what?
Simply file management, user permissions,
process management, installations, all those are kind of
critical things, which you need to be aware.
That's what we are going to focus on.
Clear, I hope everyone good.
So these are a few of the options that you need to remember.

And I'll also tell like why we are
relying on this particular part.
Now we are good with Linux, we got to know.
And in terms of Linux also,
there are two ways you can
go ahead and interact with the systems.
One is graphical interfaces, which are
Linux desktop versions.
And what we are working will be Linux server editions.
So in terms of server edition,
you will not have any graphical interface.
You're going to have what? Command line interface.
Uh, now also, let's try to understand what is the essence
of command line interface.
Because Linux and CLA, they go hand in hand. No.

Video: Linux CLI for Automation

Extracting with your server through text based cards.
Simple. You'll be running some particular command,
some kind of output.
So these commands are what we are going to do
for these activities.
I said, right, we are gonna manage files,
permissions, right?
Installations, processes,
everything we are going basically going to do with commands.
Now the reason why, so why should I do it in command line
interface and why not graphical interface, let me tell you
is the main reason,
Okay?
CLA will be a very valuable tool for automating
repetitive actions are tasks.

You'll see like how am I going
to do some activities on regular basis?
So those activities, if I do ICLI it,
I'll be able to automate it.
That's the main reason why we are going in considering it.
So you might say, can't we do these things in, uh,
what is say graphical interfaces means you can,
but this is a problem.
So performing some complex operations
would be sometimes difficult
or impossible to accomplish via graphical user interface.
So that's the main reason why we are going
and working with, what do you say, CLL Clear everyone.
So Linx, CLA, now you,
I hope now you got this building, uh, Mr.
Iv, can you please come again?
Uh, so what I'm trying to say is if, see just, uh,
I'll tell you like let's assume
that I opened one window here.
Now let's assume I want to close it.
Now if I click, I'll close here.
But let's say if it is here,
can I move my mouse in this particular position?
Are my mouse here or here? Nor it.
So it needs some kind of tracking to go ahead and do it.
But in terms of CLI, I don't need
to do this sort of actions.
I hope you're getting the point. So in certain act,
in certain scenarios, there is no way you can go
with automation if you're working with graphical interfaces,
but same kind of activities, when I try to perform
by a command line rate,
I'll get the ability to automate them.
That's the reason why we are considering and working with.

Got it Everyone. So later on, again,
don't have the confusion like in terms of DevOps,
why we are learning line expense is a primary one.
Most of the servers that you're going
to work in real time will be running linex
and they'll use server editions.
In order to work with them.
You need to have knowledge on the command line. That's it.
That is to some of the things.
Now we'll go ahead and start doing those activities
and I'll also show you why this automation
and everything comes up, right?
We'll see practically some examples. It makes sense.
Okay, so now I need to do this work, right?
So obviously what I need to go ahead
and have one server, the next server, we already have one.
Anyone you want go ahead and start it
and start connecting with this.
So already we created our uh, Linux server, right?
Both in Azure and as well
as AWS I'm selecting AWS You go ahead
and perform these operations in Azure also.
No problem. I'm just gonna start this server,
right?
And like I said, now for me moving forward,
this is my GI Bash, you see,
so technically I am in my system.
Now I want to connect to the Linux system. Same thing.
SSH icon, IL one, do pm, right?
Yes,
Dennis, I'm inside open the system
and I can just clear my screen
done with Simon in correct system to get started with.
Hmm, earlier I said any activity, I'll be going

and performing via CLA, right?
I said one command called ls. Okay?
I created one particular folder.
Now just assume that, uh, in the graphical interface,
now you'll get an idea why linnex is important.
So let's say I wanted to create a hundred text files.
Let's assume you don't know, uh, command line interface.
So let's take our normal system only, okay? One second.
What I'll do, you know,
like my desktop, I want to create a hundred text files.
What I need to do, right click
new text file, go ahead and create it.
So same, I need to create hundreds of files, right?
Is there any other approach?
You can automate it and windows at least.
So I, I've given you a task to create a hundred text files.
So how much time it might take.
So let's say you're saying right click new,
creating one file, naming it.
Let's say it took around three seconds for each file.
So if I'm going with a hundred files, 300 seconds, which is
around like five minutes, if you do very fast,
right click, right click, right click.
You just keep on going with, I wanted
to create a hundred files.
Now this is my Linux system.
It's a server technically it's also a mission which
has hard drive and everything.
So when I say list, am I seeing any text files right now?
No. Right now I wanted to create a hundred text files. Okay?
You might not know, but you'll learn.
Now you see what I'm going to do?
I just went and wrote one particular command.
I executed it. Oh,

sorry, my bad.
It was a wrong command.
I got the same a hundred files created,
but did it took five minutes for me.
I make clear what I want to convey the message.
If the same activity I ask you
to do in the graphical interface, you might not,
you definitely take at least five minutes
to create those a hundred text files.
But for me, you see, I just went with one command.
I got all the a hundred text files created in an instant,
like, just like within one second, two seconds.
Now is it clear as everyone why we are
going with the command line?
This is the reason. Technically there will be lot
of repetitive actions in the future.
We don't want them to be done via graphical interfaces.
If you know the command line interface, it would be easy
for you to perform these sort of operations.
Good, clear everyone. Okay?
Same way I just removed these things. No problem.
I'll explain all these comments. Don't worry.
Just I'm explaining you why I'm going
for CL in the first place.
You see, just like that I cleaned up everything.
If I ask you to delete a hundred text files, also you need
to select drag and do all these options, right?
But just one command, everything was gone like this.
You'll be bit more faster when it comes to work.
Also, if you rely on command, like, okay.

Video: Linux Hardware OS

How is a thing right now?
Let's assume that you bought a brand new system.
Let's assume that a new laptop you bought,
what is the first thing that you do after logging in?
Maybe someone is saying create accounts, files, folders,
maybe installing some softwares.
Correct. I want you to do the same thing. That's it. Simple.
You bought a brand new system.
I want you to talk to your system that is learning linex.
Simple. Did you get the point? Yes.
So I, I got this system now.
Now I want to know the hardware of the system.
So in real time what happens?
Someone else might create the system.
You get the access to the system, you connect it.
Are you good? What I'm trying to say,
some cloud administrator created the system
has given you the key IP address,
you connected and you're doing the work.
Now the first thing is what?
As you have a system, you want
to know what's the hardware of the system, right?
Ah. Now let's assume that you don't know from
where it was created but you got the access.
Now I want you to figure out what is the hardware.
You guys know it was T two Micro.
So it has something called one CPU, one GB ram,
some storage network.
All that information is there it.
But now I want to figure out by cell via command line,
if you have graphical interface, what you do, you'll go
to my computer, right click system properties, you go
and see the entire thing, right?
But here everything is commands good.

Oh, let's start with the processor first.
Hmm. These are all the commands technically seeing you need
to uh, kind of memorize later on.
That's how you will remember this thing.
Simple and straightforward.
I'll tell you what command is does.
So basically CAT is a command
to view text information, okay?
Later on we'll see. But for timing I'm just saying.
So when I run this particular command,
it's gonna show me this CPU information on this system.
You see It's an intel processor,
which is clogged it 2.3 gigahertz.
CPU course number of course only one CP
because T two micro is one CPU rate.
That is what is showing.
Same thing generally what when you click my computer
properties you'll see it.
But now I'm seeing the same information via command line.
Am I good This this is cp. Uh, same way I want to check ram
total 957 megabytes M means basically megabytes.
See like we have created one GB server rate.
When it comes to the T two micro, one gigabyte of ram,
it is showing that CPU ram, same way dis information.
You want to check
dfh.
Our IS eight GB system.
If you remember in AWS when I was creating, isn't it
Go back to AWS setup.
So further I got around like 7.6 gb.
So operating system is using around 1.7 GB.
Already, like 20% of that storage is utilized by my
or is itself remaining close
to six GBS available for you to use.

There is the same information generally you've
see in the graphical interface.
Now I'm seeing all the information via
text-based information,
which is also basically called us command line.
Right now we've got to know about CPU RAM storage
and what else will be there.
Network. So you know it,
every particular system has a network,
which you'll get the internet through it.
Uh, here we can use this particular command IP address.
You see I'm saying two interfaces.
We call them as network interface cards. Okay?
If I say technically they're like slots.
Slots to input your cables.
Uh, one is called low back address,
which is also called local host.
It stands for 1 2 7 0 0 1,
which is called self identifying address.
Another one is called eight zero,
which is your primary network interface card.
This is called private ip.
I said there will be public ip, private ip, private ip.
You use it for intranet connections.
In the future, when you go ahead with multiple servers
to intercommunicate, among them they use private ips.
When you communicate from internet, you use public ips.
Got the point is local address, which is local host
or you can also call it as one twenty seven zero zero one,
which is called self-identifying
or a private ip, which is used for intranet connections.
Then you got public ip, which is used for
internet based collections.
So I get all the network information. You can see it here.

Generally what in the systems we go to wifi symbol
are the network symbol and you see the IP
address and all of it, right?
The same thing right now I can see with the help
of this command call, IP address, What
anything else will be there in terms of hardware.
That's it, right? CPU, memory,
then storage network, all covered.
Those are the commands we use
to just know about your system, right?
Uh, now fine, good.
Now I want to know about operating system.
I said right earlier, this is Linux, January.
Uh, in this, which version am I using?
So that versions generally we use.
Now generally
what happens when you're talking about Windows,
you say like version Windows seven,
windows 10, like that, right?
In Linux we call them as distributions.
You are, you are welcome huh? Right?
We call them as distributions, right?
So these distributions lik Ubuntu is one distribution.
Red hat is one distribution, Ali is one distribution,
Rocky is one distribution like that.
There are different distributions
to know your current distribution, this is a command.
You're using Ubuntu 20 two.zero.
That is a current version for your right.
So now we've got hardware information,
operating system information.
Now, now I want to know number of
running processes already in this.
See when you start your Windows laptop also right?

By default a lot of things start behind the scenes, right?
So where do you go ahead and check all of it?
Task manager, isn't it?
Now the same thing here
we have something called US
H task manager.
Technically let me run this command
showing you the bar, but everything in the
CLA, am I clear?
Yes. Everyone just showing you at CPU, number of tasks,
threads that are running, all these are process IDs.
Which one is using how much?
CPU Memory, everything you can see
to come out of it.
You need to say queue meaning on your keyboard, press queue.
You'll be out. Like
you'll say close button, right?
That is equal into QQ four. Quit.
So like this, you can go ahead
and start checking the things.
Uh, if you want to see in that is like what interact,
you know, it was just like hold it the screen.
No, you want to just check only the running processes there.
Information. You also have one more command, psen,
EF processes.
The number of processes like earlier head
stop, hold the screen, right?
You can't do other activities. It'll be there.
You just want to check and continue doing your work.
This is a command. We can go with psen, ef, when I run it,
it's showing you all the list of processes, what processor,
their names and everything.
Am I good with what I'm trying to say?
So like this, basically you're going to start interacting

with the systems moving forward.
Clear. This is something that you do very often
with your laptops, right?
I just did the same thing via commands
and these things are what you need to memorize
and use it on time to time.
No, I'll update those commands in the documents,
yes, alright.
But I hope you understood.
So what the thing is moving forward,
when I'm saying linex, this is what I mean.
You just need to know how to interact with your server
by using certain commands, right?
So same thing, what I just discussed, right?
Like I said, moving forward,
everything I'll keep in your documents,
you can just verify here.
Just right now I went with hardware
and operating system commands, right?
The relevant things, they're commands.
CAT 3D, F five H, IP address,
OS release, psif
and EF head stop like that every day,
whatever the things I discuss, I'll keep it here.
Just make sure you go ahead and have a quick look
and just try to memorize those comments.
Now, if you use regularly then obviously remember them,
but it might take some time if
you're completely new to this.
But so far, ClearCase area.
So now we connected with the server
and we started interacting with our server.
That is nothing but CLI.
That's why we call it as command line interface. Okay?

Video: Linux File System

CP ramp storage network.
All the information is ready.
Now I wanna start playing with it. Like what?
I want to create some files and folders.
Uh, so whenever you start your system, what is the first uh,
interface that you're going to see?
Desktop Generally. Desktop, right?
Once you start the system, what you see is desktop.
Now technically desktop is also one location. Agree or not?
Yes. Where will be desktop stored generally
C folder users.
Like what are the username slash desktop Agree or not?
And in that particular system, there can be multiple users.
Agree. Will everyone have same
desktop or different desktops?
If you don't check today,
you'll have different desktops for different users.
If I have, I'm one user, I created
for my sibling, one more user.
He changed his desktop picture,
I changed my desktop picture, I created my own files.
He created his own files. They're going to be separated.
Where in the user location? C users.
Their documents, their desktop, their downloads.
Agree or not. In Linux also, same thing.
There can be multiple users, right?
For them also, there can be multiple parts, sorry,
multiple files and folders.
So how they aggregator. So I'll just show you right now.
See, I'm logging out of the system once again.
Now I'm not in the system, right?

I'm back to my laptop again.
I'm going and connecting just like you guys are saying.
Username, password, enter.
Hmm? Now what I get here, the thing, right?
This is basically the desktop in Linux language,
we call them as home directories.
Okay? The word you use the desktop in Linux, what we call it
as home directory.
So how do I know what is my home directory means in Windows?
It is pretty simple. When you go,
it'll show you on the top URL bar are the navigation bar in
which location you're present.
So here, if I want to do that, this is
what the command is,
PWD, Okay?
Working present, working directly.
Or you can also call print working directly
what it is saying.
Okay? Some like forward slash home, forward slash
and again Ubuntu, this is equivalent to C
uses Ubuntu.
Am I clear everyone?
So this is called home directory with every name by default,
whatever the user will be there with that name,
you'll be having a directly created
that is called Home directory.
This is my home directory.
Now, when you open the desktop, directly on the screen,
you'll see all the information we can't see by default.
We use a command called Ellis to see the data.
So technically this is what is showing me
what is there on my desktop.
In the last class I created this folder.
But generally you might see empty nothing, no data

clear, everyone equivalent.
What you do in system equivalently
in Linux, this is what happens.
Uh, now do you have only the desktop
or do we have other locations as well in your system?
Uh, like C drive, de drive. Again, like what is in C drive?
Like you got users folder, then uh, system folder,
windows folder, isn't it?
Same concept here also, but it's a bit different.
So what is the top layer in the windows when you start going
with file navigation?
Where you start first my, oh, you start with my computer.
Under my computer. C drive, D drive, E drive others
top and under.
C, drive against sub folders.
And again, files agree or not.
Uh, here it's not the same case.
How you have my computer in Windows here we call it
as root file system.
Am I clear everyone? We call it as what? Root file system.
So that root file system is denoted by
this symbol forward slash if I say forward slash rate,
nothing will say how to see the data.
Which command list? List me.
Are you clear what I'm saying? List me. Root path.
A root file system. So in
this, what is there will be visible.
This is equal into program files, windows,
system system, 32 users.
That particular parts, but you'll not see those names.
These are linex specific names.
Uh, there are different different colors. Also, right?
Later on you'll get to know eventually why there are
different colors and all of it.

Am I clear everyone? Uh,
so now this is equal into my computer.
How I can verify that, you know.
Ah, I use one command for storage. Did you observe dfh?
My storage size is what? It's like close to a gb.
You see it is mounted on
where now you got the point.
So technically your hard disc is pointed over this group.
Understand what I'm trying to say? So meaning what?
So right now your entire root file system is mapped
to your disk, which is like whatever that a GB storage.
You're going clear enough. Now, I hope that's clarified.
Uh, now in this we got different, different folders, right?
Uh, now each folder stores different types of information.
How do Siemens, you need to navigate generally
how the navigation is done.
You'll use mouse.
You just click on the subsequent folders, right?
Like click on my computer, click on see,
then go to some other folder.
That's how you do the navigation right here.
The navigation is done via C, changing the direct
R you can simply use list and you can also see the data,
but you'll not navigate.
Am I clear? Okay, I'll show you.
So this is root, under root.
There is some different, different folders.
No, list
me under root.
Some folder. Like what? There is one folder called uh, DEV.
Mm-hmm. You see I'm seeing some information.
Ah, similarly list me
under root A TC.
Ah, if you go with incorrect format, right?

Like syntax, things will not work.
List me E, T, C
because it always goes with it structure.
So route, under route, everything else.
Am I clear what I'm trying to say? Huh?
Now you'll get a clarity. How did I check my
uh, CPU information?
What was the command I used? Okay, one second.
I'll give, I'll keep the document side
by side Kat.
Now you see this after giving space, what is this
road under that block?
Under that, let's verify.
Once list route.
Do you see Prock?
Yes. Hear it.
List me under Prock.
What was the thing later on? PC info. Do you find it?
No. I understood what I did there.
Actually it's already stored in your system.
I went and viewed it via using a command called cat.
Cat is used for viewing the files, text files,
text content, not the folder content.
If you want to, to view the folder content,
we use the command call LS Ellis list.
Uh, now how can I separate files
and folders means for timing, color.
What are the blue color things
you're seeing at the dark blue?
Uh, these are basically called folders.
The things which are seeing in the white color, right?
That text wise I clear everyone.
So once again here,
the dark blue things are folders.

The ones you're seeing in the white color files.
Uh, this one you're seeing, uh, it's like teal color.
That is basically called links. Technically shortcuts.
You'll have shortcuts on desktop now.
Yeah, which will point to some other file. Original file.
Those are called links. Okay?
Uh, so one more thing.
Generally we have the habit of using the word called folder.
Now in Linux we use the term called direct directory.
So directory then under that files, okay, so here what?
These are all directories, these are files.
Shortcut is also technically a file.
Agree or not, it is pointing to some other original file,
but that shortcut will be there on the desktop
to easily access something similar.
Okay? So that's why when we go ahead
and start doing the commands, now we need
to be careful about what command vendor use.
Okay, I'll just add the same information for timing.
One second.
So in Linux we have C user desktop in Linux,
the same thing we call it as home directly,
which will be under home.
And your username, PWDI already said present.
Working directly in terms of Windows, we have my computer.
And in terms of Linux, we have the root file system, right?
And how you can verify that with the help of D, FI and H.
And now once you go into the main file system, right,
you got root under that.
So many other folders each, sorry,
each directory stores different types of information.
You wrote names right?
Earlier dial bin, PROC, correct?
So each one stores one specific type of data.

Bin stores, binary files, a, D, C, stores,
configuration files, pro stores, process information,
temp stores, temporary files, home stores, home directory,
both stores, boat loader files, mo stores, mount directly,
OPT stores, optional data like that.
Every particular folder is designed to go
with some sort of information.
It's not like randomly they have separated out.
It's just based upon what type of data you go with.
There is some specific directory already
pre-created and kept.
And already the data is also pre-populate.
Uh, when to use what you'll eventually get to know.
Not everything is important over here,
but technically like home directory, ETC, directory,
OPT, directory, temp directly.
These are the things time
to time will keep on using as we progress.
Understood. I hope you got the point.
Is this just like you're my computer?
CC folders program files system 32, uh,
like later on Windows 32, like you have it the same.
Okay, good. Everyone, right? So now we got to know.
Yes, we have the system, we have files we can navigate
and I can go ahead and also start working with the things.
Uh, now whenever I'm going
and working with some commands, like right now,
you see I said list command.
So now if I say something like CAD
slash ps earlier I said list
P, now I'm saying cad.
PS what are you saying?
So a directly cannot be viewed with cast only.
You can use list cover, correct?

Ah, same way if I say List
pro,
I'll not see the content.
It only says whether that particular thing exists or not.
So like that every particular command is designed
to do a different operation.

Video: Linux Manual Pages

Directly where the home directly is present.
Now if you don't know any command in the future,
like I'm going to work with it.
So every command already has some helper documentation.
Like I assume that you're using some, uh,
brand new product that you purchased.
You'll always get some manual pages along with it, right?
In order to understand how it works.
In Linux also, same thing. We got a command code man.
This man will tell you what each command is.
Let's assume that you don't know about PW
Man followed by command.
Is it what it is doing?
That's it, right? When I say PWD,
what it is doing it is printing the
current working directory.
URN. That's what it means.
It'll tell what your commanders basically,
and same thing if you want to come out
of it, say Q for Twitter.
Uh, these are all like options. I'll explain later on.
What are flags and options? Uh, same way.
Uh, I was using the command called L
list what directory content.

Meaning if it's a directory,
if in the directory you have any content, it's going
to show it Got the point is
now same way Q4.
Uh, instead I use one command.
So like this, you're going to have all the commands,
like not only this, you can check other things man,
right?
And I was using free then followed by hyen, ate in your,
These Are all called
flats options.
You can see like when you say right click,
you'll see the options look in your windows like it.
So it's saying free hyphen. I only said free.
You see here it's showing all the options like press
center, it'll show you the options.
B means bytes, K means kilobytes,
M means megabytes, gigabytes,
terabytes, petabytes like that.
You can go ahead and check.
Am I clear what I'm trying?
So these are called options so
that you can see additional information.
So if I don't give hyphen M option, right?
Let's say what happens Q for
it's showing you the bytes.
Hope you understood. Same thing if I want
to see it in, uh, what do you say?
Kilobytes. Oh, sorry.
By default it's showing kilobytes thought like it's by,
but no, by by default it's showing in there kilobytes.
Next, like
that you can go ahead and check your information clear.
What I'm trying to say is, so that's

how you can use the flats if you want
to understand what's the meaning of
that particular option you're giving
after the command, right?
Okay. Same thing. If I say only df,
again, it's going in the kilobytes format, right?
So again, what
report file system and disc space usage.
And same thing, if I go, uh,
you see now it's showing clearly
That was the option I used no
h human readable format.
Print the sizes in the parts of 1,024.
Example, like 1023 megabytes.
Understood. These are like manual pages. Next time.
Also when I use some command, if you are not able
to understand, are if I'm, uh, what do you say, uh,
planning some command at some point of time.
If you did not understand, just use man command.
It'll self explain why you're using that command.
Okay, good everyone. So now you see this how we are working.
This is a way of working in DevOps throughout your course.

Video: Linux Manage Files & Folders

How do we mention or how do we know the home directory?
Pw Present working directory.
I got some particular folder here called us AC data
and I can go ahead and create multiple other folders,
or sorry, other directories and also files per files.
I said we can work with a command call touch.
So if I said touch,
I say we got one file then,

but generally touch will create empty files.
You'll not have any content inside it.
Now if I want to go ahead
and check the content I showed you in the last session,
there is a command called cat.
I can use this particular command called CAT
to see what's the content inside that file.
I cannot use CAT with Directress.
If I say CAT AZ hyen data, isn't it a direct?
Got it. I can use directories only
with the list command then only I'll be able to see
what was the data inside it by using List.
So if I say Cat,
hello txt, am
Nor it. So what's the meaning of it? This file is MDP.
There is no data inside.
Now, if I want to update the data
inside this particular file,
I need some editor, uh, in Windows.
What is the most popular editor
that you use in order to update text data?
Not the programming. I'm talking about normal
text, not bad, right?
Not Pad is pretty much, which you use very often to go ahead
and do the work.
Right now this is in Windows in equivalent to this in Linux,
like most of the Linux distributions, you go with Red Hat
or let's say you're working with Open Linux, right?
Any Linux there is something called like V-R-V-I-M,
which is called Visual Editor.
This is equal and two.

Video: Linux Vi Editor

Using vi.
So using vi, you can also create the files as either,
you can go ahead and check the data
or you can modify the data
or you can also create the text files using vi.
We'll see now how I can use this. Let's see.
VI followed by the file. Need.
Now if already the file exists now it'll open it.
If the file does not exist, it's gonna create it as of now.
Hello. TXT file is there, right?
Let's see, via
hello txt.
Uh, now once I go ahead
and start opening this particular file,
you see what it's saying in the bottom?
Uh, zero lines and zero bytes.
So as of now there is no data in this particular file.
Now I want to add the data, right?
So generally what in notepad you'll
directly go and start typing it.
But here we can't do it.
We need to use something called like mos.
There is something called insert mo.
If I want to type any data, I want
to start updating the data.
I need to be in the insert mode
and how you can get inside the insert modes.
You need to go with I on my keyboard.
I'm clicking I You see
that in the bottom.
You see it says insert Right now you just update the data. I
hope you understood.
Ah, now I'm in the insert mode. It'll be in this mode.
It is only for editing and adding the data.

Now, once you're done with updating the content, you need
to get out of the insert mode
or you need to exit the insert mode.
Say escape. You see, once I clicked on escape
in the bottom, I'm no longer seeing insert mode.
Ah, now you are in the command mode.
Earlier when you were typing,
you were in the insert mode insert.
Once you come out of the insert
mode, you're in the command mode.
Now you need to give few more commands to update.
So once you're done with editing the file, generally
what we have the habit like control S our file sale,
the same thing over here, you need
to say command mode can be entered via column type colon.
You see on the bottom you got colon right?
And after this we need to pass the inspections.
WQ, right? End it.
This is in Windows control S
and Ctrl X, right
R Technically speaking, closing that particular window.
So once you're done with the edit, you'll close it.
Particular file it after saving.
That's the same thing I'm doing right now.
So I'm saying colon wq, which means right
and quit Done, right.
Ah, now what I want to see the data.
So CAT is only for viewing, it's not for editing.
If I want to edit, I'll use VIA one.
I make clear everyone go with this.
CAT is for viewing. Via is for editing. Ah.
Now what we have only one file,
which is something like hello dot t txt.
Maybe now I want to create a new file using via.

Yes, it is possible via uh, I have Hello. Right?
Uh, do we have any file call via TXT now? No.
Right, so via now will create a file. Am I good?
Okay, let's see it under, you see in the bottom it is saying
new because this is the first time we are
creating this particular file.
And same concept again, you want to add the data if
for insert, then go ahead and add your things
you don't like just say backspace.
Yeah, tell
insert yes.
Can I say hi? Like just you need to type on the keyboard.
You don't need to type anything.
Just press I on the keyboard type start type. Okay.
Directly. I There is nothing else.
First time only after insert mode,
it'll not go into I, right?
So if I say type I, it'll press I only
because when the insert,
I will come when you're not in the insert.
Got it.
And same thing. I want to modify or I want to say escape.
Wq. Am I clear?
Everyone good with this? Now if I sell list,
you see I got couple of files clear everyone.
So any text files are most probably,
I'm gonna say in the future also any configurations,
whatever the work we do, right?
It is all going to happen with the text information on
all settings, configurations,
everything will be simple text files first.
Okay, good. So now I was able to create files
and you already know how to create the directories, right?
We simply use a command card, make directly MKDR,

and let's say anything like, let's say AWS folder,
I have updated.

Video: Linux Sudo

In my home directly.
See I did CD a s also.
I was able to do the operations there,
which is part of my home directly.
Now I want to go to OP t. Rate optional data.
See earlier what I did, CD AWS did it work?
It worked, right? You see any problem?
No, I'll say CD tilt.
Coming back to home directly
how I can verify Home Open doc.
Now let's say I will say CD OPT,
uh, not create.
So the thing is OPT is another directly route,
whereas the AWS folder is already present in
the location which you had.
So you don't need to give full path.
So this is called relative path
related because I'm already in that location.
Did you get what I'm trying to say?
Absolute path means full path.
So OPT, what is the absolute path for OPT means?
It always begins with slash
and I'm not in that particular location now, so
that's the reason why it is not working.
So if I want to go to OPT, always I need to say,
did you get the point?
Is what I'm trying to say, right?
Okay, now I'm in which location?

Uh, do I have any files or folders over here or directories?
I'll try to do something here. You see
what you saying?
Did you get the directly
Earlier when I was doing all these
operations, they were working fine.
Where? Um,
which means technically home directly in the home director,
I was not getting any issues, right?
Once I navigated
to a location called OPT, I started getting issues.
Not only OPT, any other particular folder, I go ahead
and try to do the operations, right?
Accept your home directory.
And there is one more folder called
temp under the road.
Accept these directories.
You'll not be having permissions to go ahead
and update as you wish in the system.
Am I clear as everything?
Uh, now why this error is coming up, let's try
to understand, but it does not
make complete sense right now.
Once you go into the permissions
and all those concepts, you'll get an idea,
but I'll tell you what is the reason for it.
Right now, the folder that you're seeing O pina,
it is under which primary folder route.
Agree or not. Now Ls.
Now if I say Ls only the normal information I'm gonna
see, uh, I separate it.
For every particular command there is a flag option
LS hyphen LL stands
for long listing format.

I'll say route. Now you see what you're seeing Additionally
other information, right?
Which earlier I didn't.
So I want you to focus on this part, what it is saying.
Route and route. So technically
this files are folders.
What we are seeing, the directories, they're owned by root.
Are you good everyone? Ah, same thing.
Home direct. I'm giving
where the Ubuntu folder is there agree
or not under root home, under
that Ubuntu, what they saying?
But whereas for root, root,
so technically this folder is owned
by the user called Ubuntu.
So as you logged in with Ubuntu user, you was able
to do all those objections.
Am I good everyone? Whereas the other folders are owned
by whom wrote, but you are working with what Ubuntu user.
So for that particular reason,
you're not having the access to the system.
Am I good everywhere clear
or not what I'm trying to say?
So now how can I overcome this particular issue means you
can, there is a special command called pseudo.
This is standing for
super user.
Do that command basically AEs per
super user do.
Now technically a super user is nothing but
root user.
Am I good? This you have user right?
Like this in your system there is also one more user called
root user who is actually the primary user in your system,

but you'll not directly get access to this user.
I will explain you in the future how to work with this.
Now, if I do this operations with
that command called pseudo, right?
If I do any operations, pseudo command,
you're technically using that command
to execute the user call route.
See, simple what this command is
is selling.
You're working with the user called,
sorry, what did it say?
So what this concludes when I use pseudo
root user will switch.
And with that user you are doing the work.
Am I clear everyone? So that's the reason why
in my home directly that
is home directly see all the folders
and files whom they're coming with
Ubuntu, because who created it?
User code. But now you're trying to create content
inside OPT, which is not owned by Ubuntu, that is owned
by which user wrote.
So how can Ubuntu perform? He cannot.
So if I want to do that operations, I need to perform
that operations with what?
Pseudo command. So when I use pseudo,
meaning you are using this command
as the root user, I'll once again do it.
See in this OPD, am I having any content?
Nothing. Zero. Now I'll say pseudo
M-K-D-I-R-I should earlier I tried the same command without
sudo it was giving you what?
Error. Permission denied.
Am I getting any permission denied error?

No, no it but the folder was created.
But if you see the permissions by using
that hyphen l command, who owns it?
Approach. Because you have executed the command with what?
Sorry? Now did you get the point As everyone, so
whenever you are going and performing in the future sessions
also whenever you get permission issues, right?
Permissions are not correct
or it says not allowed to perform this operation,
pseudo access is required.
At that point of time you need to prefix your command
with pseudo are good.
Everyone from online. Is it clear?
Guess what I'm trying to say?
So saying pseudo means you're executing this
command with root user.
Uh, root user access is not required in home direct.
It is required when you are out of the home director.
Am I in the home directory right now? No.
I'm in location called OPT, right?
Which is not home directly.
So that's the reason why I need solar access
all clear from online.
Any confusion on this part? What I discussed?
Now technically, can anyone tell me, uh,
what is the equivalent thing in Windows?
If I want to do the same operation
in Windows, what should I do?
Okay, so you guys are correct.
Sometimes what you do when you try
to install something, it'll not allow.
So what you do, right click run as administrator.
That run as administrator is pseudo technical.
That's what I'm saying, right Click run this command

as boot user administrator,
all everyone, okay, now I can work in my home directory
or I can go to other locations and I can work
but need to be cautious that I need
to use the command called as.
So when I use soda, what is the meaning?
We are running this command as administrator,
like root user, a super user.
Ah, we also have certain commands to switch
to the root user, but later on we'll discuss.
But as of now, we just want to perform those operations.
Good, clear everyone.

Video: Linux File Operations

You see I have certain files right now, folders.
Uh, now I want to copy the data.
Generally what you do, control C,
control V are right click copy, right click paste.
Uh, when you're doing what you'll do,
you'll select the source, you'll go to destination
and perform the action, isn't it?
Some file is there on the desktop, you'll say right click
or control C, then you'll use your folder.
Navigate and say Right click paste
or control V in the destination.
Destination might be D drive or E drive your choice.
Uh, right now I have some content, right?
Uh, this particular content, I want
to go ahead and keep it in sum.
Other destination.
List me
one second.

Okay. You see this right now?
Uh, I want to see what is the content inside
is the hyphen date, am I having anything?
Now I don't want to create, I want
to copy, which is already exist.
Now what is my existing fo file means? Let's say hello.
Text this a file.
I want to copy this file to this folder or this direct.
So this is my source, this is my destination.
Command goes like this. Copy source. What is the source?
Ah, where is the destination?
Ah, simple cp, space source. Space destination.
Earlier we had no data, right?
This is as simple as control C, control
I make clear everywhere.
Source and destination.
Now if I want to copy the same thing
to some other folder like OPT, then CP
hello dot PXT
and I want to copy the destination, call OPD,
will it work what it saying?
Because you're not allowed to do the operation there, right?
So if I want to copy, what should I do?
Understood. Simple. As simple as this.
You can go ahead and for uh, now this is for what?
Copying files. If you want to copy folders.
Now little bit slight change in the syntax.
So let's say right now I have AWS folder, right?
And I have slash OPT folder.
Do I have AWS folder here? I want to copy.
So when I want to copy the folder R directory, you need
to use one option called hyen, r recursive,
we call it meaning folder.
Subfolders sub files, everything will be capital.

Pseudo snappy hyphen
r recursively.
If I don't give hyphen R eight, it'll not copy the folders.
You see copy.
AWS is a WSA filer folder.
Folder and slash OPD destination. Earlier I copied file.
Now I'm copying folder. What it is saying,
it's only explaining now what is not specified.
RR is not specified.
Sodo,
did I get any error?
It isn't because you have given the option which is
required, which is hyphen r.
Now let's go ahead and see
what the point is.
Everything. So when you're copying the
folders, follow this approach.
Ah, it might be like new,
but these are all the things that I said, right?
You need to memorize for copying file one syntax
for copying folder one syntax when you're
doing in your home directory.
One syntax when you're outside the home directory.
Once it tax. Got it.
Okay, now I copied same way.
I can also perform other operations.
So right now I'm in my home directory.
There is one file called Hello tx.
I want to rename it in Windows.
How you do it right, right click rename
the file and you can say R controller, it'll re in here.
The same thing is done by a command called mb.
Original file name, new file name.
What's original file name, space.

What's the new file name you want to give?
How I good? This earlier the file name was what? Hello?
Now it has been changed to. Hi. Same thing for folder.
My folder name earlier was what? AZ hyphen data. Mv
the original file, sorry, folder name was AZ data
and then we change it to Azure.
So MV, we can go ahead and rename same way.
MV can also be used for cut and paste.
Control C, control V, control X, control V,
which is basically cut paste is nothing but move.
You're moving the data from one place to another place.
Command is same. Then now the confusion.
So when I'm using MV, earlier it was using renaming.
So how can I say with mv, I can go ahead
and perform move operation, which is cut and paste.
It depends upon how we are passing the syntax.
Move C. Here I have a file called what?
Hi, do txt.
If I give one more file name what it does, it'll rename,
but instead, you see what I'm saying?
Is it file name Azure? What is Azure directory folder.
So now you're technically moving it.
If I say Azure txt, then what happens?
Tell me you're renaming it
because Azure txt does not exist.
So now technically you are saying I'm renaming this file
from high txt two Azure txt, but I don't want to rename.
Now Azure is already there. Now it'll move it.
Uh, safe Azure does not exist
Then. Then
let's assume that there is no folder called Azure.
Now then what It'll do thing once.
No, it'll rename the file called high txt two Azure.
Okay, clear. And these are the things

that you do typically in your uh, windows, sorry,
you create, you go ahead
and uh, copy, you rename, you cut, paste
and another option is you remove.
Uh, here also same concept.
Removing can be done with the command part R uh,
but here in Linux there is no concept of recycling.
If you delete something, it's permanently deleted.
Am I clear? Is what I'm trying to say?
If I go ahead and delete some file
or folder, right, it's permanently gone.
So right now, if you see here,
there is a file called GCP, right?
I don't want that.
Remove that file
Claris.
Now can I through that file install in Linux,
there is no concept of recycle bin.
Once you delete permanently delete. Ah, same thing.
If I say folder,
A WS is a folder over here, right?
What happened? Ah, R
and by default it cannot remove a folder.
Same thing. What should I do?
I'll go with hyen. R
like copy.
When you go and work with records, you need to work
with the option call less hyen R
are you clear is what I'm trying to say.
So isn't it regular activities you create
then you copy, then you
rename or you cut.
Same thing with what both we did with files
and as well as folders there everything you use,

shortcuts are menus by right clicking
and doing that operations here.
Everything we did with the help of commands, that's
how your work style will be there.
But clear everyone. What I'm trying to say
from online is it uh, clear?
Guess what I just wanted
to explain right now these are basic operations.
Everyone should know how to go ahead and check your files
and folders because once we start working with applications,
right, there are a lot of files and folders coming up.
Sometimes you remove, sometimes you create copies
So that if you do any operations on the original copy it
might get uh, corrupted, right?
So you wanted backup copy at that point of time.
All these commands will go and use it.
I what I'm trying to say
how you say like I downloaded some code base.
If I directly go ahead and perform operations,
the original code base might affect,
you don't want to do what you'll do.
You'll make a copy and you'll keep it separate
and do all the experiments in this new copyright.
I can do right now the same thing if I know all these
particular commands, am I good?
Yeah. So the same things
what I just discussed now all these operations right now
what I'll do, I'll add it in your document.
One second.
This is how I manage the files and folders.
MKDI touch CAD command
and for each command I did the explanation.
Check this document, this is more than enough, right?
And then followed by I use CD command

changing the directories and we use the via editor rate.
I'll also give the syntax for VA editor
via filing I for insert colon w
write colon q, wq, write and quit.
Q not means discard.
Sometimes you're writing, you don't want to do any changes.
Now you'll say discard changes.
That is Q, not R wq, no like that.
You can go ahead to create a file with VA.
Also I said you can directly go ahead and say VA filing.
It'll create it like this.
What we discussed about pseudo command
and also the file operations.
Now I'll give all those syntaxes as well. One second.
Pseudo command. How to use examples.
See I tried to go ahead and create one folder in OPD.
It didn't work. So later on what I did,
I used the pseudo command
and I tried with the pseudo command hit work follow
of the same and then file operations.
I want to copy certain files and folders.
No CP command syntax
and how I did all the operations.
If you're working with folder, I said hyen R,
same way MB command renaming how to go with the syntax.
And if you want to move how the syntax goes working
with RM file removal, directly removal, when you're going
with directory hyphen R.
So if you follow up this particular documentation rate
easily, you'll be able to perform all the
operations. What we just try to
See clear everyone.
So like this, everything what we do moving forward,
I'll keep all the syntaxes,

but it's your responsibility to make sure that you follow
and execute that syntax.
So industry and try out variations
and any variation that is spelling,
make sure you're noting it down.
When we come back in the next session, we'll discuss
what it is everywhere.
Okay, so now you see
what were the typical operations you do in Windows,
especially with files and folders.
Can we perform them? And it's not
so complicated if you see hardly seven
to eight commands, isn't it?
Or not M-K-D-I-R list tag VI.
Uh, then followed by what? CP MVRM, right?
Pretty much eight to nine commands.
If you know this commands right,
you can manage all the files and folders moving forward.
Ah, right now I created it,
but technically what happens,
all this data will be there already in the systems.
Whereas it was a brand new system.
So we went and we need to create.
But when you start working in real time
already the data will be there.
Having the road directory, the data was there.
Similarly, in your home directories,
in your application directories data will be already there
pre-populated, but you go ahead
and perform all the options using these commands.
Are we good? Right? Okay.
Now let's say I was working with files and folders.
Very good. Now sometimes what I might want to do,
some other operations.

So assume, right? Uh, you got hundreds
and thousands of files with you.
So generally you want to transfer it, load somewhere else.
Generally what technique we use, you got a hundred files.
Uh, let's say some file hundred files.
Uh, you say go ahead and use mouse
or like you select that particular area.
Generally that's what I do.
Like let's say I got a hundred text files or some folders.
I'll select all of them.
I'll say right click, send it to zip folder, agree or not.
Then I can transfer easily.
I want to do the same thing in Linux. Do I have any menu?
Right? Uh, so further that you got again, utilities,
something like zip.
But when I try, you see what it is saying,
command, zip, not phone, right?
But when I was working with other commands,
it was never saying that thing, right?
You see CP command, is it saying command not phone.
MB command. RM command.
It is saying missing. Missing means you're
not doing the proper sentence.
But when I was trying with zip command what it is saying,
uh, something similar to how you did in Windows,
by default you had GI Bash, you went and you installed.
Then later it started working right in this system.
Also, not everything that you're looking for will be there.
Sometimes we need to install
and we need to work in Windows.
How did you install? You downloaded one EXC file.
Then you said double click next, next finish here.
It's not possible because there is no interface rate.
Installations also via command line.

That is what next we are going
am I clear is what I'm trying to say.
So I'm just tweaking this server according
to my use cases moving forward
because in the future if I want to install some application,
I can't go ahead and download and uh, ex file install.
It'll not support. So what it supports how
to install is our goal.
Next. Am I clear what I'm trying to say?
So just like tweaking your server according
to your use cases coming forward.
Am I good? Yeah. From online.
I hope you understood the point, is what I'm trying to say.

Video: Linux Installations

So in the previous session we had the discussion regarding
how to manage the files and how to go ahead
and start setting up some text information.
So today we'll go ahead and start understanding how to
with the installation.
So let's assume that you have brand new system,
you just created files and folders,
but you did not install any software.
Now I want to go ahead and start installing the softwares.
And I already said we don't have any menus
or any screen options over here.
So everything we are going to do here,
command line itself, right?
So let's see in command line
how I can go and install the things.
So same thing, once the server is ready, I just want you
to go ahead and connect with your server.

Ravi. One Doubt here. Yeah, Go ahead. The thing
Is, you are, you are, uh, always, always, uh,
connected to the server, right?
So you are, so from now you'll install all the
applications in the server.
True? Exactly. So everything moving forward will be server
first, nothing in the local laptop.
So you'll, you'll, uh, do, you'll install Terraform,
Kubernetes, and Dockers all in the server?
Yes. Okay, fine. But
Yep.
Okay. So how I can confirm
in the correct place right now, we can go ahead
and start working with the things.
Okay, so let's start the use case actually.
So why do even I want to install something first?
If the software that you're looking for is not there,
then you go ahead and start
installing the software, isn't it?
So what is the use case for this?
You know, so when I said list, now you see I got some files,
folders and all this, right?
So assume that I have multiple folders and files like this.
I want to take all of this data
and then I want to prepare one zip file.
Pretty much the same thing you do in Windows also,
but what you do, you do it graphically.
Select everything rightly, send it to zip folder.
Now what I want to do via commands I wanted to do,
but earlier itself, I showed you when I was trying to look
for a software called Zip no,
it was saying command not form.
But when I did for ls, did I see the same thing
when I using CP command?

MV command, right? Yeah.
So when I was going in running this particular commands,
I never got any issue.
But when I was trying to go with zip command, it says
what Command not phone.
Meaning technically that software is not yet installed.
Uh, you want installer, pretty straightforward.
This is the command pseudo
app install followed by your software, okay?
Any software that you're looking for.
If it is not there, you need to go ahead
and start running this following sentence.
So pseudo app install
and the app you need, uh,
this is something similar to doing the searching
your uh, play Store.
You go to the Google Play store, the app
that you did not find, you'll search it in the Play store
and you say install equal into this particular command.
Pseudo app install and the app name that you want install.
Uh, here what I want, install an application called zip.
Right now you see when I say yes now it'll show you from
where it is downloading and install.
You see there azure.archive.ubuntu.com/so officially it
is going to Ubuntu site on that.
You see what it did? It went it fetched and it installed.
That's it. Like technically speaking.
How you say click install button,
that's the same thing I did right now.
Or you can assume technically
behind the scenes something like this happens
when you click on buttons.
What the point is now, let's see,
I'll use the zip command to execute right now.

It said command not form. Now is it saying command?
Not for now. It is showing me the options, meaning
what Zippy is right now installed on this system.
Are you good? What I'm trying to say, that's it.
Now I can use zip software technically
and what we do with zip generally you take bunch of files
and create one single archive file, isn't it?
That's what we use it. Same thing.
We can do it right now, but again, it has a syntax.

Video: Linux Archives

Now you see what I'm going to do?
Uh, can you see there is one folder and file over here.
I want to take this content and create it like a zip file.
Simple command is zip.
That's this utility name,
but we need to go with the syntax note.
Uh, see the syntax for pretty simple zip.
What's the file you want to create?
Create the zip file in this bot.
You want to add your choice.
If it is only file, you can say simply file, name,
space, add whatever you want.
File one, file two, file three like this.
Um, and folder is there now.
So whenever you have folder, you need
to also include hyphen R.
What is the folder name? No, your choice.
Keep on going and giving spaces.
Add whatever the content you want.
These two files on folder five.
See in my file one,

Correct.
That's it. Here everyone.
This is like how you say right click
and send to a compress zip folder.
That's exactly what we are trying to do, right?
When I execute, let's see what's going to happen.
Can you repeat it please?
Uh, what I'm saying is in Windows, how do you select a bunch
of files and folders and say right click to send zip folder.
That's a syntax. So syntax here says create a file pull
my file starts earlier.
There was no such file. Now let me see. List basic.
Now this file is created. My file starts in this.
You have this content updated.
Is it clear? I clarify the things
and I have only one zip file.
Now you see what I'll do?
See what I'm doing? I'm deleting it.
Do I have those files now gone?
No, but what they,
where they're already stored in the zip file, right?
My files, yes. Like how do you unzip?
You directly double click
and say extract in windows here also,
I need to do the same thing now.
Now I want to unzip. Unzip,
But what are you saying?
You see un archiving,
archiving earlier Now UN archiving say list
you deleted but we got it back.
Meaning is the data kept in the zip file? Agree or not?
That's what we did, right? Do are you good?
What I'm trying to say? Yeah. Got it. Got it right.
Same thing you do in Windows only,

but you're doing the command line operation.
That's the only difference. Next, the advantage is using uh,
what do you say, different commands.
You can do same operations, same like different browsers,
different SSH clients.
Isn't it? Same gmail.com I can open with Chrome,
I can open with Firefox, I can open with Safari.
Is there any difference? Same way
I use which command?
Zip command and unzip command
to extract and archive the data.
Now the same operations can also be done
with a different utilities.
Seven zip wind Z ra.
Did you heard of the softwares? They all do same thing.
Different companies give them same thing in Linux also
you can do this way or there is one more utility called
tar TAR.
Tape archive we call it. It does same thing.
Why we are learning this. These are the two popular ways.
How I said GI badge and put your two popular ways.
Similarly, you can either go ahead and work with zip files
or also sometimes you'll say tar files.
So when you say tar file, don't get confused.
It is basically it. What you say Archive.
We'll do the same thing. Tar Uh, advantage
of tar is already installed.
See Tar command Iran, it's showing me options.
It's not saying command, not for. Got it. Now.
Now I'll say ta. Oh, so one second.
Ta C, sorry.
Hyen C create
FIE
extension goes s.my files.

Do TA include what you want add here?
You don't need to specify any hyen directly.
It'll take, I want to add a folder called Azure
and also a file called
I did same operation using a built-in software called tar.
Understood. What I did is same thing.
I again took the files.
I created one more file call my files tar.
It contains the same. Now I want extract now.
So what I will do, I'm deleting that content.
Do I have that content? No,
but the content is also there in the tar file.
Agree. Now I want to extract back
like cf xf.
Are you good? What I'm saying? Tar CF create xf extract,
extract the content from which file?
My files dot tar.
I got the content back. Same operation I did
with two different utilities.
You can make a call via Samsung phone.
You can make a call via if that's the only difference.
So like this in Linux you do have multiple
utilities which does the same thing.
It's up to your choice how you want to use them.
Terra is inbuilt, zip is not there.
We install and we use it. Factor it in real time.
What happens? That files already exist
or you might download it from somewhere and you do it.
Understood what I'm trying to say.
The simple example, I'll show you, uh, I have some uh,
code with me, which is given as a zip file.
Okay? I hope you understood what I'm trying to say.
Just I'll show you simple. I'll go to my Google
and I'll say simply download

or if not, let's go like this.
Just you see I'm searching for this.
Uh, Docker,
GitHub, just search like this.
You also
click on this thing.
The first site. Uh, any one of this,
what you're seeing now, just select one of them.
I'm selecting what combos. You can select anything.
Your choice. This is all the code. Now.
Now there are so many files, right?
Uh, I'll just tell you if I want to download this file
or if I want to download this file,
if I download this file, I'll click on it file.
I need to click on raw
or you see there is one option called download raw file.
So if I click download raw file where it'll download, uh,
in this laptop, yeah, not on the server,
but I want to download in the server.
What I need to do, right? Click this thing.
Uh, you see here, raw file. Click on this.
You showing the full link. Now
I need to copy that link.
I need to go to here in my server.
W get is a command use.
It'll not install what it does it
download in browser.
How do you download? Go click on the button, it'll download.
But here we don't have any browser now.
So that equivalent is
W Gate, web gate.
It stands for Web Gate.
If you see man command, again, it'll make sense
in non-interactive network download,

it'll download Simple.
If you say double gate, you see what it is expecting.
URL. So it's saying you give duplicate
and a link, I'll download it, file you.
Are you clear base what I'm saying?
See there is no file right? As of now.
Double gate, that link I have given.
Now what it is saying,
go MOD Save.
Let's see. S do you find that Fine.
The third one you want, you can check Cat
go MOD.
I'm seeing all the content. I downloaded only one file.
Agree. Uh, now in here,
if I go back, there are hundreds of files and folders.
Can you see? Check here. I'm going back one second.
See here. So many files again, sub folders in that.
Again, sub folders and in that, again, sub files.
Tell me how much time it'll take
to download each and every file.
Long time, right? If I click on searching like that,
it would, would it be convenient?
No. So I'll go back again
simply I'll click on this button called code.
You see what they're saying? Uh,
if I click on download, zip here,
it will download to my lab.
But what I'll do, right click copy link.
Are you getting the point is copy that link address.
I will go here, w get link,
which file it is downloading do zip.
Do you understand the purpose why I just
going with all these operations,
I want download the multiple ones this through.

Not like that. That's when we use
scripting repetitive options.
We'll loop them. That's when some programming
skills are going to be coming up.
Next we'll see all those activities.
Uh, do we get the zip file?
Uh, now I want to see the content inside it.
What should I do?
Are you seeing the same thing?
See so many files and folders lot.
Uh, think if I wanted to download each
and every file like this, it'll take forever.
That's why you use archive in zip concept.
Now, if I want to extract the data from this,
you see totally there are 642 files,
it does not make sense to go out
and use W Gate 642 times, isn't it now?
Understood the purpose of archives.
Uh, now if I want to extract the content
from here, so what should I do?
Simply simple.
All that folder came up.
If I see the content inside it, I got the same thing.
You see go dot MOD.
Earlier I downloaded explicitly,
but now I can see directly from it and now clear.
Isn't it the same thing you do in Windows?
Of course you do it if you ask me how to do it in Windows
or any other thing, right?
I'll show you. There's the thing.
No, I said download now I'm not doing in server,
I'm doing it in my laptop.
I'll go ahead and I'll say what? Download, uh, download it.
It is asking where to download.

I'll say download it in my downloads folder.
Okay, saved.
Uh, where did it saved in my browser?
I mean like my file system though. I'll open it.
Can you see that? And how do you extract it?
Double click and say extract. No,
double click extract extracted.
Same thing I got, that's the exact thing
what I did right now in the cl.
Just whatever I did right now, just
for understanding purpose, I'll
write that particular syntax.
Just verify it. So
for installations rate, we went with the things.
So when working with installations,
what we have, we have something called like a PT,
A Powerful Package Management tool in Ubuntu, it stands
for Advanced Packaging Tool.
It's a user-friendly way
for managing your software packages.
Either installing, updating, removing them,
you can do all the things I install.
Now, psdo app install.
You want to update, update, remove, remove.
Same command itself. You replace
sodo.
This is how you install. If you want to update
like this, if you want to remove like this,
just replace that particular
thing, thing that you want to go with.
Install, update, delete all the operations.
You can go ahead and perform with the help of a bt.
And so we saw on a zip
and unzip, we are not there

and small change here
We
So what is the syntax for it?
Pretty simple. Pseudo app install
ZIP was not there by default.
So how did you install it?
App install, zip, then followed by,
we use the following syntax to go ahead
and work pretty simple and straightforward, right?
Okay. Now same way,
uh, we used another command called
th which is already there.
So we don't need to install it exclusively.
Tar cf, tha xf, along with the syntax.
These are the two popular ways we go ahead and work.
There are other things also that you can
pretty much figure it out.
Once you start using commands
or use the man command, you'll be able to get it done right?
Okay, so good.
Now we got to know how the archives also work.

Video: Linux Advanced Installation

Then this stuff.
So I assume that you have a Java application.
Your development team,
they have given you one Java application
and they want you to run the
Java application on this server.
What are you saying? Java? Meaning what?
This server does not have Java. So what?
How can I install it? Ah, See C,

that's why you need to check the options.
Someone asked an abortion,
which version you want your choice?
I think Java 11. Is there 17? Is there 18? Is there 19?
Is there 21? Is there eight? Is there, Hmm?
Which one you want your choice?
Maybe I will go with something like Java 17
and right.
Let's see what happens.
It's asking, this operation will download some
200 MBH things.
If you want. You can say yes if I say no, no, it'll not work
about Java is not installed if you verify it.
No Java. Ah.
Every time it is asking you it.
If you don't want it to prompt, you can say hyphen y.
Yes for all. How do you say next? Next, next.
No, it'll say yes for all. So it'll not even prompt.
It'll only download, it'll install it.
Let's verify once earlier it ask me it.
Now if I run it, it'll not ask.
It'll start installed in the menus.
You say next. Next. The same thing,
Java won't.
Ah, that won't because it does not work in that manner.
Now I install it right now. Let's go ahead and see.
I'll run Java. See it's not saying command, not form.
It's executing it, showing you the options.
If you want to check the version dash version it seems,
and same thing you see in these many ways,
you can print the versions dash
version, dash dash version, dash show version, like it.
But I'll say java dash
what you asked it in store like that.

You can go ahead and start also doing the thanks.
Clear enough everyone.
So like this, you can install utilities,
programming languages, tools
for your Terraform and all these things.
Now in the future there are all tools.
Technically those tools in this manner we can install.
If it does not work. Sometimes what happens,
vendors will give you script search.
They'll tell to install some software.
There is a script we'll download
and we'll install that script.
How you'll learn eventually
what the point is everyone, I hope you are clear.
So like this, you can configure your Linux server
based upon your choice, right?
Okay, perfect. Someone drawn
on the screen I guess.
Okay.
Okay, good.
Now we are clear with the installations.
I hope everyone, but remember this is not the only one
where there are other ways also you can install.
Uh, I'll show you one example just
for understanding purpose.
There is a software called Cube ct. Okay? Okay, fine.
I'll search it for you in case you're new to all this.
Where it is pointing to it is one
of the subsets softwares inside Kubernetes.
Okay, what's the software name?
So I try
what it saying, font phone, not font,
but you see it is not saying APT
installer, something like that.

Because in their store, Kubernetes is not there.
Assume like this in the place where there is no Kubernetes
with Ubuntu official repository,
they don't have cubes Cube, CL software.
They're saying something else.
Sodo snap in store, let's try. Maybe it works.
What they're saying error.
It was not available or it is not published.
Did you get what I'm trying to say?
I'm trying this software called Cube CL,
but it didn't work out fine.
You might say try it with app. Okay, I try it with app also
unable to locate because it's not there.
Did you get the point? What I'm trying to say
like this multiple ways will be there
when you go with installations.
So this software will not work like this.
You need to download it and then you need to use it.
That will make sense once I start learning about the tools.
Uh, exactly from W Gate.
I need to download, I can use now
how if you want, I can just show you right now.
So we don't have any cube CT software
or anything over here, right?
Uh, I have link. Uh, you can download it from here also.
Technically. One second I will go to their site
installing on Linex.
You see, you see they have given some link.
They're using curl command.
This is also another way to download, okay,
did you get the point is this is also one way you can go
ahead and download it if you want.
That's fine. I'll copy this.
See I'm pasting.

See they're also given link HT T ps deal downloads.
Do gate dot something dot something. I'll execute.
Download it. Can you see that file
now because uh, this will be fast here.
I downloaded it right now I want to use,
but regular cube CTL command will not work technically
because this is not how you use it.
It's downloaded. Now you need to use it dot slash cube CTL
In The current location.
The file name dot means current location.
You see what it is saying? Permission denied.
It'll give it, but we can fix it.
But see, don't get convinced.
The idea here is to explain you
that installations will be done in
different, different approaches.
That is one approach I showed you.
This is another way I'm downloading it now.
I need to give some executable permissions.
I'll explain these things later on.
CH model plus X means I'm giving executable permission.
Now you see it is working.
It's saying command not form. Understood.
So don't think that, okay, I use this thing.
It'll throw out be my course like this.
Now it changes based upon the software,
based upon the tool we are working with, right?
We have installation instructions. We'll follow it.
Am I good everyone? Claus,
there is no such hard code thing like this is how I do it.
No, based upon the vendor documentation, we'll go ahead
and do the installations.

Video: Linux User Management

If you remember.
Yeah, these were some of the files
and folders that we played around in the last session.
So today we want to understand in terms of Linux,
how we can manage users and permissions.
So by default we are getting access
to something called user.
Correct. So when I logged in, by default,
when we created the system,
that was a user we created and we logged.
If I try with any other users, right?
It's not gonna work out.
Actually I said there is also a user
called As Route, isn't it?
Which is called like a super user.
We were using the command call as pseudo
to figure it out, isn't it?
When I say pseudo, right?
We have one user called US Route.
So what I will do, I'll log out from the system
instead of going with the user called us,
I'll try out with the user called Us Route
and let's see what it says.
You see it is prompting me what log in
with the user called us tu rather than trying out the user
called US Route Reason.
By default route icons are not available for you to go
and use only the admin icon called UND is there,
but maybe you might want to give access to other people
to work on the system, right?
So in that particular regard, how we can come
to this particular partners by default,

password based authentication is disabled only Passwordless
authentication is there meaning you'll be always using Keys
to log into the system,
but I want to change the behavior possible means yes,
you can go ahead and change the behavior according
to your patch now, but further what?
First we need to have the accounts right?
By default we have route, account route.
You can never go ahead and access directly.
So I want to go ahead and start creating some new accounts.
Then I want to go ahead
and access the system with IT accounts.
Are you getting the point? Uh, let's see
how we can get this thing.
The same thing. You do it in control panel.
Generally go to control panel user management,
click on add User, you'll be able to add the user
and set the password and you can log in.
Now I'm literally trying to do the same activity using
commands, okay?
Are clear. And the thing that you need to be a aware is
by default these operations you can only perform
with Ubuntu user because there is no other user
to work in the first place.
You log in with Ubuntu, do the actions,
then later on go ahead and try out with other users as well.
Okay? So first, as there is no scope, I'll be logging
with Ubuntu user only.
Good. Okay.
Now there are certain commands that you can figure out
with the help of Linux
to know about the accounts in your system,
like user accounts technically, uh,
there is in command called id.

You can use this particular command
to figure out whether a user exists or not in the system.
Let's say id,
do we have any such user?
Oh, so that's why it's saying there is no such user.
If I say ID route,
it's prompting the information like user id,
group IDs because the user exists.
Am I clear to this? So based upon whether
that account exists
or not, you can figure out with the help of ID cover.
This is one way. There are also other techniques as well.
Uh, all the users that you work with in your system,
a file called P-A-S-S-W-D is present in the
location called ETC.
This file contains all the user's information earlier.
The command will help you figure out whether the user exists
or, but this particular file will help you.
All the users which are there in the system, it'll display.
Are you good? Okay, so when I just go ahead
and execute this particular command, let's say,
what's the information it's showing me?
A lot of text information came up over here, right?
Okay, so technically these are all users
like Root is one user, demon is one, user bin is one.
User ING games male, UUCP proxy.
These are all users, but you'll not be able
to work with all those users.
Those are basically called as system users.
Meaning as a part of your operating system,
some users came out, okay?
Uh, now we have you see open to user
and root user aspect, okay?
Yes. Now technically

if you closely observe it, I'll just show you C
for Ubuntu user at the end, uh,
this contains this information, your username, uh, user id,
group id, some comments, home path
and followed by Shell
Shell, we call it a shell.
Now you see what is a shell saying Bin Bash
and others you see Bin Falls,
no login bin Falls and only for Root.
You got Bin Bash the accounts which we have Bin Bash only
those users you can go ahead
and book other accounts you cannot
access, okay?
Bash is basically call us Shell
Shell is basically a command line interpreter.
If you want to communicate
with the system, we'll be using Shell.
Okay? Clear everyone.
So other accounts, no, not possible,
but the accounts that have been bash, I can go ahead
and switch and I can do the work.
Uh, if you have soda access, you can directly go ahead
and access the system because I said no, he's super users,
no issues right now I'll show you pseudo
assume Dash user.
Now, earlier I had a user called games are already saying
this is how you get it, but whereas when I try the same
thing with the root, let's see what happens.
Now I'm not
in ub, I'm aware.
Am I clear? Yes. So only the icons that have been bashed,
you can go ahead and work with Route is there sir?
Clear everyone. Okay, if you want just you can say logout,
I'm back to my actual users.

Okay? Uh, now the thing is only route
and UB are the users right now I've got access to.
Now the idea is I want
to create my own user and start working.
Now in that particular regard, like
how you have control panel, uh, with uh,
what do you say add user A button.
Here we have something similar by using KA command
pseudo because we need system level permissions
to create a user, there's a command loop
add user followed by the user name earlier,
the user called Rev does not exist in this system, isn't it?
No. I want to create,
this is how I can add user followed
by the user name.
Okay, let's see. When I run this particular command,
what it prompts me,
it's setting them IDs and creating the home directory.
In the home location. You see earlier in home location
only was there.
And moving forward a directory
with the name called Rev will also be created
and it's prompting me to update the password,
confirm the password.
Once again Your details you can enter.
These are all optional details. Yes.
If you don't enter, also not a big deal.
All this valid information, then you say yes.
Earlier when I said Id w that said user does not exist.
And as well as use the CAD command once again to see if
that user was updated here.
And you see we got bot access ash.
Now let me try to see pseudo switch user to the,
yeah, like how we got open

to account right now we got this account called Ravi
and here I can do my work moving forward.
Uh, but technically
what I did was from Ubuntu I switched the user,
but actually the other user when he wants to log on from
outside, right, he'll find some technical issues.
Let's try to figure it out. So I'll say log out.
Uh, better what? I'll open one more session.
Open GI Bash and click one more GI Bash.
You'll get two sessions parallel.
You can connect two sessions, right?
I'll do something similar over here.
You see this is not my system, like not my server,
this is my laptop technically.
Now I want to connect with the user called us
Ravi downloads.
You understand what I'm trying to do? I created the user.
So I'm saying I log in with this user.
You're still in the same server, right?
No, I'm not in the server, I'm in my laptop.
I opened the second GI Bash.
No, no, no. In the first thing you have created
the user, Ravi, right?
Mm-hmm. In that, Ravi, you are in the same server, right?
I'm the same server, yes, The same server.
But you have created new directory called Ravi.
And from Ravi you have used, uh, to log in, right?
Uh, no, you're getting confused.
What I'm saying is from open to user,
I created a user called Ravi
and I switched to the user call Ravi
by using the command call sr.
Okay? Okay. Right? Yeah. Okay.
Now you see I'm not able to log in, right?

So it's saying permission denied.
Now the thing is always remember keys are specific to users.
The key which was there, it'll only work for Ubuntu user.
No one else. Fine.
What I'll try to do, I'll try to avoid the key
and I'll try to log in,
understood what I'm trying to do.
SSH user it that particular ip because there is no key.
If you don't give anything, it'll look in
your system only the key.
But for this user, that key is also not valid.
Now, to log in with this user,
there is only one chance password.
But does our system support password?
Now we can change the system behavior
to accept the password.
I said in the earlier sessions.
Also, it is possible for you to go ahead
and change the system settings.
So now I'll get back, this is my server, right?
Actually going to server from here.
Now I'm going to start tweaking the settings.
Uh, this can be done in two, two different ways.
If you're using AWS path is different.
If you're using Azure, server path is different.
I'll keep both the paths based upon your criteria.
Go ahead and look at it. Okay, so when you're working with,
uh, what do you say, Azure system, this the path,
let me see the path.
Pseudo via basically it's say file iterate
slash atc SSH
sshd SSHD config D
50 hyen cloud hyen.com.
It's fixed path. I'll keep this part in the document anyway,

but just remember if you're working with uh,
Azure service, this is the path for AWS.
It's a bit different.
Like I said, I'll keep in the document.
You can verify for both. Okay?
So in this path they'll say
whether the passwords can be accepted or not.
Okay? So when I open this particular path,
let's see what's the content we'll be seeing up right next.
What are you saying? No,
that's why our systems are not accepting the password.
Uh, you already know how to red file it.
I for insert update this from no two
escape call wq, right?
And then we updated the setting.
So once you update this configuration file, we need
to restart not the server, the software as we are edited,
what software assess it itself.
Pretty simple is a command use.
As it change SH configuration, I'm restarting the tests
technically in Windows.
It is like closing and opening.
Understood. The point is you just opened the software,
you closed it and you're reopening.
That is basically called as restart.
Restart it. Yes. Services.
We can restart. Okay, now I
modified the content and I said restart.
Now I'll go back over here.
Earlier I tried the same command. This was not successful.
Right
now you see it is prompting you to go with the password.
I updated it. Do not show. Just type and hit enter. Enter.
Did

you get the point is what I'm trying to say.
So now in your system you created one user
and with that user you are able to log,
oh exactly how you created a user in a desktop.
The same thing we have the command slides is what you want
to set the password for Ogun to user.
Yes, you can command goes like pseudo
P-A-S-S-W-D, that's the command.
And which user you want to set the password,
update your password.
Okay. Okay,
I'm typing the password.
I'm gonna reenter the password.
Once again, password set.
Now you see what I do wanted? I'll log out from here.
You see I did not pass any key.
Yeah, IP address,
Password,
Same. Now you
see this is how traditionally
you can get the systems done.
Like maybe if you guys are used to passwords, then go ahead.
You can use this particular approach.
You can set the password and you can start using the text.
Similar and straightforward. This is what a user means.
They'll just logging into the Linx system
to perform operations.
Now I'll add few
commands to what we just discussed.
Okay? One a second.
All things like I was just discussing about add user
id command who I command switch user.
You want to add the new user? Add user command.
Uh, now in case you want to go

with password based authentication
for AWS, this is the path.
Okay, I just showed you in uh,
open server, sorry, Azure server.
No. Which is this path right now.
Earlier example, if you guys are working on AWS,
same content will be again same to same by default.
Password authentication will be yes, just change it to no.
And then same, same restart. SSH, and you're good.
So people are going with AWS modify this file.
People are trying on Azure, modif, this.
These are the only small technical differences you find
across the platforms.
Pretty much almost same.

Video: Linux Permissions Intro

User can access because he's a default admin.
Let's try it out. Here is my user call
CD slash opd.
Okay.
I want to remove something.
It says the file is right protected fine. Okay.
I want to delete it. I would say yes.
Okay, sure. Then I have one more option of pseudo.
It's asking the password of this user.
I'll try the same option with this window.
Yes, I have given the correct password
and still it says that you are not authorized
to do this operation.
Yeah,
No they are not.
That's what the permissions concept you're learning.

So don't assume that all the users get same level
of access within the system.
No. That's why we are doing this exercise to understand
that Ubuntu is special user.
All the other users are normal users, right?
So we are, I was not able
to do this operation with which user?
User. I'll jump here.
Same system I got access to,
but with the user called as Ubuntu,
I'll say remove head T xt
and pretty much it says the same thing.
This file is right protected.
Yes, I do want to delete it,
but it says what Permission denied
and I would attach any issues.
No, go delete.
Are you getting the point? Oh, now this confirms it.
This user is always special compared to other users.
That's why this particular user called
is not going to get access on the system level.
Why means maybe will confus you,
but there is a concept called as groups in Linux, like
how you have users, there are groups,
how there is information in ETC password.
This is where you find groups.

Video: Linux Groups

With some special permissions.
There is no login for groups.
My batch for batch, there is no login.
Individual users have login.

Same concept, right?
If I go ahead and open this,
can you see some information here?
Uh, the first parameter you're seeing is basically call
us group name.
So how the system is designed in Linuxes,
every user you create by default with the same name,
a group will also get created.
Along with this, there are some special groups.
The group name is called Pseudo.
A user who is part of this pseudo group will be able
to do admin level activities like
running the pseudo commands.
By default, only the user Ubuntu
is in this particular group.
Can we add other users? You can.
There are commands again,
but the point is what I'm trying to say.
So why Ubuntu user is special,
because he's part of some group called pseudo group,
which is super user dual group.
Any identity like user you add to this group,
they will be able to perform pseudo level activities.
Am I good? Right?
So earlier with Ravi, I was not able to perform, isn't it?
Uh, I said no, there are commands
modify a user append to another group.
That's what it means.
Which group, which user.
Now it's like you're dragging this user
and putting in a group called ps.
And earlier you uh, saw it in the pseudo group only.
Which user is there? Let me execute
this reverify.

Now I have both Ubuntu
and as well as Ravi in this group, right?
No. Anyway, I removed that file,
but I think there is also one
directory for us over here, right?
This operations were not successful. They failed, isn't it?
Because of lack of access.
Okay, while it's still showing the error is simple, uh,
the session is not yet reloaded simple.
Uh, I'll just go ahead and log out from here.
Once re-login
like UB to now I got access to this user call Azure.

Video: Linux User Group Permissions

Write, execute,
read, write, execute,
read, write, execute.
Your permissions will be set in three different approaches.
Three. Three. Three
technically dashes.
Three dashes each
understood the point in those blanks you can feel,
read, write, execute.
The first three are basically for user,
you represent it with you.
The second three are for group you represent with G.
The next three are for others you represent with O,
user group, others.
So technically right now what is the permission?
Saying RW dash
R dash dash r.
Dash dash. So

what does it mean exactly?
That's the only, That's it.
So you're saying like technically the
user can read and write.
Others can only read and also group can only read.
Okay, now let's technically verify that
I'm saying vi with which
user O and two.
And who is the owner right now
See in the bottom what it is saying
Because he's not owner, right?
Others are basically what? Read only.
I hope you understood the point. I'll quit.
I'll say Ka. Hello? Do text.
Can I read with same
because he others technically now the owner, right?
Am I seeing anything like read only because he can write,
read, work, modify.
That means write. Now what I'll do
ch mode
O means others
minus
Armin read.
I'm saying for others minus read
for which file did you understand?
Further views The command called CH mode
changing the permission bits
execute
all flat.
Now technically no permissions earlier the other
person called Ubuntu.
Was he able to see the data?
Sorry, not okay. Can
And now I can't even read because you only said it.

Take away read.
Am I good with what I'm trying to say?
If I want him to read one second what I need
to do, change mode.
Change mode. Can he do it? No. Because who is the owner?
He can do it. If I say CH
mod, others should be able to read on this file.
Operation is not permitted
because not you're not an owner technically.
Am I good? Yes. If I try the same thing, if I,
If we give the iPhone then we are removing the permission.
If we give the plus, we are providing the permission, right?
Yes. Hyphen is like you can say minus.
Okay, Now
let's try the same thing over here.
Now he's the owner, right? Did it work?
Now see the permissions back. Did we get the read again?
Good. Am I clear how the things are
working right?
Uh, this is one way.
There is another way to manage the permissions.
No permissions. Zero.
If you use symbols to represent the permissions,
it's called symbolic way.
If you use numbers to represent the permissions, it's called
uh,
absolute right?
Your choice outcome is same
but how you want to do it, which one?
If you use symbols to go with the permission,
it's called symbolic way.
If you use numbers, it's called absolutely your choice.
Both will same give you the same outcome.
What you're convenient you can use.

So if you want to use the things via numbers, I'll tell you
C RW dash RW
means four, two.
So altogether
plus you need to rate is four, right is two.
This dash, dash means zero four plus two plus zero.
Here read means
four four.
So technically six four.
Four indicates a owner can read and write.
Group can read, others can read.
If I do like this, tell me
Number
Exactly.
Technically everyone can read only
because you said, ah,
if I want only the owner to read,
no one else should have access.
Then CH mod.
Okay, that's it.
Now 4, 0 0 only owner can read others
know group also know. So that means we have
To pass the three digits, right? Right here.
Ah, yes, I mean CH more four double zero.
If you pass only four it won't allow.
Ah. So syntaxes are like,
see this is very standard way of going.
If I say four
silver, but people get confused for what?
Okay, So that's the reason why generally it is good
to go with a standard syntax,
Okay? Okay.
Right. Yeah. I hope you got the point.
Yes. The same thing we used for key.

If you guys remember PM file was there,
I said Chm mod 400 pm file.
Because what I'm saying now,
only owners should be able to read.
No one should be able to read even the key content also
because it contains secure data, right?
You don't want them to see that's when I go ahead
with this particular correct.
So if I say CH mod 400 right now, technically
what no one else will be able to see the key.
Neither the groups, not the users, other users
only my owner will be able to go ahead
and see that clear every, I hope you understood the point.
These are pretty basic commands we use on regular basis like
permissions for groups.
Groups also maybe like once we have certain
use cases in the future, right?
Then I can discuss on it.
But I hope you got an understanding, okay, this is
how the system behaves.
CH more CO. There is also one more command called CH group.
You can change the group also currently,
if you see the
owner is root is group, I want to change the group also
to Ram C,
H group C owned, change owner, CH group change group.
So
am I clear you can change the owner,
you can change the group, you can change the permissions.
Good clear view.
So like this we can go ahead
and control based upon what you, so
where all this commands will help me in
the upcoming sessions.

Okay? I hope you got the point.
So later on you'll see like in case,
so right now we only talked about read and write execute.
We didn't talk right? Because text files are not kind
of executable files, executable files when they come,
once you start writing some scripts, some
binary applications might be there at that point of time.
Executable skills, we'll learn it in
the upcoming sessions again.
So a few things I said right at that point of time.
Makes sense. If I give executable permissions for file,
it does not make any significant difference.
But if you want to do so, how you can Siemens
this way humans, user plus X execute.
Or if you want to give it in the number format
because read plus write plus execute
four plus two plus one seven.
What the point is what I'm trying to say, either you can go
with this way or you can say U plus x so
that you can give the executable permissions.
Either way it is fine but the numbers are standards, right?
It won't change, right? 0 1 2 standards for read.
It is always four for right, it is always two.
Execute is always one. Okay?
Okay, good. Clear.
I hope you understood the point everywhere I guess
so this is how, so that's what I'm trying
to say is just like Linx keeps on coming throughout the post
because every now and then some new things you are going
to work with new commands keep coming up,
but at least you got the basic idea, right?
So like last these two, three sessions was to
make you understand that
our work moving forward will be in this manner.

See, you wanted something, I was doing it by SCLA
and only purpose is basically
to communicate with the server.
Finally, good, clear everyone
now, now what we know how to manage the permissions, how
to install the softwares, how to modify the files, how
to modify the permissions, how to change the login access.
These are pretty common things
everyone should know when you're going and working with it.
Linux server now.
Now we got that server right now on top of it,
moving forward we are going to start work working
with applications.
So far I did not talk about anything on the
application level, isn't it?
All I was just talking is there's a system I'm interacting
with as simple as that.
Now, once we understood how to interact, I'm going
to consume this server for my application.
Next. Now who will develop applications
development team, right?
There will be a set of developers, few engineers right
now we are going to start moving towards that
paralleling server is there.
Now some other team is there who is building the products
and once they build from there
how it comes into the server is the
next, am I with this?
The actual purpose of using this server is that one,
they'll give an application later on.
We need to deploy that application in this server.
But if you don't know how to even log in,
if some file comes up, if you're executing,
it is not working, these are your solutions.

If it is saying permission denied, you know the answer.
If it is saying it's not writeable, you know the thing, how
to go ahead and make it writeable.
It is saying you're not authorized
to perform this operation.
You know how to change the permissions.
All those things may be slowly, you are going
to get it right at that point of time.
I'm gonna use all this particular command
and a lot of new commands you're going
to learn just in the future.
Got it? So you can say parallel your Linux
and DevOps will continue till end of the course.
Linux will come daily. Every now
and then some new commands, new things,
you'll be keep on looking at it.
But the same thing. What I am going
to use the commands I'll keep in your document, just try
to go ahead and look at sometimes
and memorize, okay, clear everyone.
So I hope now you understood what is server, how to connect
and how to do regular operations in server
and a lot of things we'll be learning in the future too.
Now next what I'm going to do is I'm going
to use this server for my development purpose.
So for this, what I'm going to hold the server
for a few days here because now we need to understand
what development team you're doing.
So far, what you did as a DevOps engineer,
you guys are DevOps engineers.
You un you understood basically
how a typical administrator is working.
Agree or not. I was an admin, I just went, created server,
logged in, playing around with the service.

That's what I do always.
And the skills you need to know in order to go ahead
and understand and troubleshoot a server.
You got that? Next word, I'll be a developer now
from tomorrow, I'm not an administrator, I'll be a developer
and I'm gonna show you our introduce you,
how people in the development office,
how do they develop a project, how they go out
and write the code, what they do in terms of development,
build, release, testing, deployment, all those activities.
I'm going to start next. So once you understood both the
domains, then you guys are ready to start with diverse.
Technically you're learning the prerequisites.
Okay, Claus from online everyone.
So I hope you got the point.
So tomorrow onwards, our activities are not operations
development, uh, which product we are going to developments.
The thing that you're using right now that what,
whatever the videos you're watching now, LMS application
that we are going to see
how they developed from the scratch till deployment.
Okay, good. Everyone clear?
Any question guys? Let me know.
Aye, I have one doubt.
How do we create a, a user, uh, as a sodo user?
No. Bio default. You cannot create
a user as a pseudo user.
Okay? Yeah.
So I have uh, I have a,
let's say I have a raise a ticket
to create my user in a particular server.
Okay? So the route admin
or the Linux admin will create a user
and he will provide this to the access, right?

How do we first create the user initially?

Add users. Add user. Yeah.

Maybe you missed that part right here.

Yeah. The command I was using was called ADD user.

Add user, Yes.

And then after that we need to add that user

to the SDO list.

Is it.