

7.2.3 Managing User Passwords

Click one of the buttons to take you to that part of the video.

Manage User Passwords 0:00-0:39

In this demonstration, we're going to practice managing user passwords. This is done using the `passwd` command on the Linux system.

Before we go any further, it's important that you understand that if you run the `passwd` command as a standard user--notice that I'm currently logged in as just my `rtracy` user account--I can manage only my own user password.

Which just makes sense, you wouldn't want all the users on your system to be changing each other's passwords. You could have way too much fun with that. If I enter '`passwd`' here, I can simply manage my own user's password. If I want to manage passwords for other users on the system, then I need to first switch to my root user account.

Assign a Password to a User Account 0:40-1:35

Let's go ahead and make a new user on the system using the '`useradd`' command. This account will be created for the 'Kimberly Sanders' user account, `/home` directory, and the name of the account will be '`ksanders`'. We've created the account, it exists on the system.

If we go in and look at our '`/etc/passwd` file', you'll see that the `ksanders` account has been created along with all the default parameters. But if we look in our shadow file, you'll see that the `ksanders` user does not have a password defined. That's because when I ran the `useradd` command, I did not use the `-p` option in the command line to define a password for this user account.

Any time you see a standard user account with no password defined, that user account is locked, and the user will not be able to use it to log in to the system. We can manage the passwords for this user account using the `passwd` command.

View Password Status 1:36-3:23

Let's load the '`man`' page for the '`passwd`' command. If we scroll down, we can see that we can use the `-S` option with the `passwd` command to view the status of a particular user account.

Let's go ahead and quit out, and let's do that very thing, '`passwd -S`' for the '`ksanders`' user account, and notice right here that it has an `LK` in the output of the command. That `LK` indicates that the account is locked.

The `passwd` command also displays additional parameters about the account, such as the date of the last password change, the minimum number of days required before a password can be changed, the maximum number of days before the password must be changed, and the number of days prior to password expiration when the user will be warned of the pending expiration, and finally, the number of days to wait after a password has been expired to disable the account.

Basically, you can see we are pulling all of this right out of the shadow file for the `ksanders` account right here. It also tells us over here what we already knew from the `LK` text over here that the password is actually locked.

To enable this account, we need to assign a password to the `ksanders` user. To do this, we enter '`passwd`', then the name of the user account, and it tells us that we are changing the password for that user.

Let's assign a new user password, and now the `ksanders` user account has a password assigned to it. Let's run the status command again against the account, and notice that it says `PS` now, which stands for--as it indicates over here--that the password has been set.

If we view the shadow file now, we see that a hashed password has been added to the `ksanders` record in the shadow file. So now the user can actually log in to the system.

Change the Password to an Existing User Account 3:24-4:49

We just saw that you can use the `passwd` command to assign an initial password to a user account, but you can also use the `passwd` command to change the password of an existing user account. Notice that my `rtracy` user up here already has a password assigned to it. If we need to change that password to something else, we enter '`passwd`' and then the name of the user account.

I'm going to show you something kind of cool about the `passwd` command, and that is if you use a wimpy password--one that is not strong--it will yell at you. I'm going to use a dictionary short word, and when I do, it says, "Hey, that password is shorter than eight characters."

It will let me do it anyway, but it does yell at you a little bit if you use a bad password. Let's do that again but using a good password this time, and when I do, the `passwd` command is much happier.

On very rare occasions you may actually need to remove a password that's assigned currently to a user account. This will be done only on very rare circumstances. Let's say we need to remove the password from the `ksanders` user account that we just created.

To do that, we enter `'passwd -d'`, or delete, and then `'ksanders'`, and it removes the password from the account. Let's go ahead and reassign a password to the `ksanders` account, and let's bring up the `'man'` page again for the `'passwd'` command.

Lock/Unlock User Accounts 4:50-6:00

Notice that there's also, if necessary, the option to lock a user account, and you can also unlock it. Locking is done with the `-l` parameter. Unlocking is done with the `-u` parameter. Let's go ahead and quit out of the `man` page.

Currently, we have a password assigned to the `ksanders` account. If we look at the status, we can see that the password is set. Remember, if we remove the password altogether with `-d`, it does lock the account, but if we wanted to, we can still leave the password set and just lock the account.

Maybe `ksanders` is going on an extended vacation--she will be away from work for a couple of weeks--and we don't want anyone to be able to use her account while she's gone to get into the system. To keep this from happening, we can just lock that user's account. When the user gets back, we'll unlock it and they'll still be able to use the same password that they were using before they left on vacation.

To do this, we type `'passwd'` and then `'-l'` to lock it and then the name of the account `'ksanders'`. The user account is now locked. A password has been assigned, but the account is currently locked. When the user gets back from vacation, we can change the `-l` to a `-u`; unlock the account. If we look at the status, we see that the password is set and the user is able to log in.

Summary 6:01-6:22

That's it for this demonstration. In this demo we talked about how to manage user accounts with the `passwd` command. We first used the `passwd` command to initially assign a password to a user account. We then used the `passwd` command to change the password that's assigned to an existing user account. We used the `passwd` command to view the status--the password status--of a user account. Then we ended this demonstration by talking about how to use the `passwd` command to lock and unlock a user account.

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