



Passerelles numériques

A Gateway for Life



OS & Maintenance

*Chapter 8 - **User and Permission***



Objectives

- After finished this lesson students will be able to:
 - Describe what is users account?
 - Define type of user account
 - Explanation of group account
 - Demonstrate how to create user account
 - Basic knowledge about permission
 - What is permission?
 - How to check permission of files and folders
 - How to check file and folder owner



Authentication?



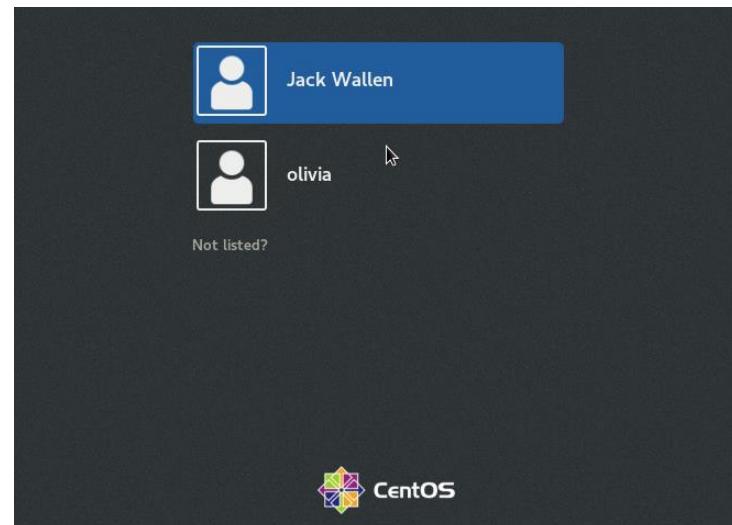
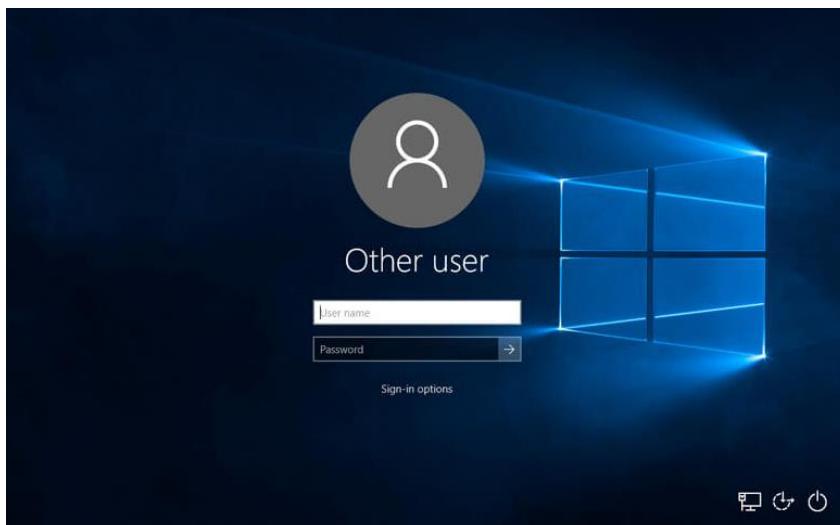
**What can I use to log into
the computer?**

Why do we need user account?

**What are the type of user
account?**

User account overview

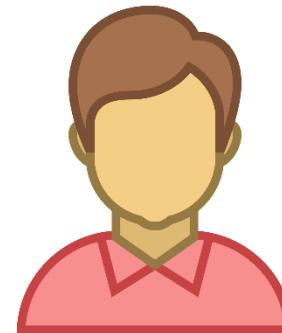
- **User account** is a collection of setting and information that allow or not allow user to connect to a network, another computer, or other shares.
- A user account is characterized by the following:
 - **User name**: the name you are giving to that account.
 - **Password**: the password associated with the user account (you can also use blank passwords).



Type of Users Account permission

Type of users account there three types of user account:

- Administrator account
- Standard account
- Guest account



Type of Users Account

- **Administrator user account** has complete control over the PC. This user can install anything and make changes that affect all users of that PC.
- **Standard user account** can only use the software that's already installed by the administrator and change system setting that don't affect other users.
- **Guest Account** is a special type of user account that has the name Guest and no password. This is only for users that need temporary access to the PC. This user can only use the software that's already installed by the administrator and cannot make any changes to system settings.

What is users group?

- User group (Group) is a collection of user accounts that share the same criteria (security rights and permissions). A user account must be a member at least one group.



How to create Users on Windows



To create User Account on windows

- ✓ Windows Run → `lusrmgr.msc`
- ✓ In console tree, click on **Users**
- ✓ On the action menu, click **New User**
- ✓ Type the appropriate information in the dialog box
- ✓ Select or clear the check boxes for:
 - **User must change password at next logon**
 - **User cannot change password**
 - **Password never expires**
 - **Account is disabled**
- ✓ Click create, and then click close

Change Password Policy on Windows

Change other password options

✓ Windows Run → secpol.msc



How to create Users on Linux



- To create users on Linux Operating System, we can use command line:

useradd -m username (create a normal user with its home directory)

Ex: #useradd -m geeko (will create user "geeko" and home directory in /home)

- To assign password for user:

\$ passwd username

Ex: \$ passwd geeko (will assign new password to user "geeko")

```
[root@otrs home]# useradd -m geeko
[root@otrs home]# passwd geeko
Changing password for user geeko.
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: all authentication tokens updated successfully.
[root@otrs home]#
```

How to Delete Users on Linux

- To delete users from the Linux Operating System we can using command bellow:

userdel [options] *username* (delete user, only Root can do it)

- # userdel -f *john* : force to delete user "john", no asking message
- # userdel -r *john* : delete user "john" with her home directory
- # userdel -rf *john* : force to delete his user and home directory at the same time

```
[root@otrs home]# userdel -r geeko
[root@otrs home]# ll
total 8
drwx----- 20 kea      kea      4096 Aug 15 11:30 kea
drwx-----  5 rayut    rayut     136 Aug 14 17:01 rayut
drwx-----  5 sopheak  sopheak   136 Aug 15 11:29 sopheak
drwx----- 16 test    test     4096 Aug 10 10:34 test
[root@otrs home]#
```

How to Manage Users on Linux



- Although we can use command help to identify with the syntax that we will create on the Linux System.

```
$ useradd --help
```

```
$ userdel --help
```

```
[root@otrs home]# userdel --help
Usage: userdel [options] LOGIN

]Options:
 -f, --force                force some actions that would fail otherwise
                             e.g. removal of user still logged in
                             or files, even if not owned by the user
 -h, --help                  display this help message and exit
 -r, --remove                remove home directory and mail spool
                             directory to chroot into
 -R, --root CHROOT_DIR      remove any SELinux user mapping for the user
 -Z, --selinux-user
```

```
[root@otrs home]#
```

How to Manage Users on Linux

- We can verify the users was created on the system or not by using command line below to check on the:

\$ cat /etc/passwd: is the file which store the users account on the system.

\$ cat /etc/shadow: is the file which stores actual password encryption.

```
nobody:x:65534:65534:nobody:/nonexistent:/bin/sh
libuuid:x:100:101::/var/lib/libuuid:/bin/sh
syslog:x:101:103::/home/syslog:/bin/false
mysql:x:102:105:MySQL Server,,,:/nonexistent:/bin/false
postfix:x:103:109::/var/spool/postfix:/bin/false
dovecot:x:104:111:Dovecot mail server,,,:/usr/lib/dovecot:/bin/false
sshd:x:105:65534::/var/run/sshd:/usr/sbin/nologin
landscape:x:106:113::/var/lib/landscape:/bin/false
eric:x:1000:1000:mixeduperic,,,:/home/eric:/bin/bash
jim:x:1001:1001::/home/jim:/bin/bash
bob:x:1002:1002::/home/bob:/bin/bash
tony:x:1003:1003:Tony Smith,,,:/home/tony:/bin/bash
"/etc/passwd" 29L, 1257C
```

How to Manage Group on Linux

- To create group on the Linux Operating System we can using command below:

```
$ groupadd Class-2021
```

```
[root@otrs home]# groupadd Class-2018
[root@otrs home]#
```

- We can delete group by using command line:

```
$groupdel Class-2021
```

```
[root@otrs home]# groupdel Class-2018
```

How to Manage Group on Linux

- To **add** the users to the group we can use command below:

```
$ gpasswd -M user1,user2,user3 [Group]
```

```
$ groupmems -a user1 -g [group]
```

```
[root@otrs ~]# cat /etc/gshadow | grep SNA-Team
SNA-Team:!:::
[root@otrs ~]# gpasswd -M kea,sopheak,geeko SNA-Team
[root@otrs ~]# cat /etc/gshadow | grep SNA-Team
SNA-Team:!:::kea,sopheak,geeko
[root@otrs ~]#
```

How to Manage Group on Linux

- To **delete** user's member in the group on Linux Operating System, we can use command below:

```
$ groupmems -d user1 -g [Group]
```

```
$ gpasswd -d user1 [Group]
```

```
[root@otrs ~]# cat /etc/group | grep SNA-Team  
SNA-Team:x:983:kea,sopheak,geeko
```

```
[root@otrs ~]# groupmems -d geeko -g SNA-Team
```

```
[root@otrs ~]# cat /etc/group | grep SNA-Team
```

```
SNA-Team:x:983:kea,sopheak
```

```
[root@otrs ~]#
```

How to Manage User and Group on Linux

Before modify the users and groups account, we need to know user structure bellow: `$ cat /etc/passwd`

```
geeko:x:1006:1009:IT Admin:/home/geeko:/bin/bash
```

1. **geeko**: username
2. **x**: password of user
3. **1006**: user ID
4. **1009**: group ID
5. **IT Admin**: comment / description of user
6. **/home/geeko**: home directory of user
7. **/bin/bash**: shell user is using

How to Manage User and Group on Linux



There are two type of users in Linux system:

1. **System users** : user account that generated or created by system
2. **Normal users** : simple user account that created by other user (Root or member in group Root)

User and group ID on Linux system:

- **System users** start from **0-999**
- **Normal users** start from **1000**
- For **Root** user by default has user ID and group ID **0**.

Instructor Demo

- Instructor demo to students create new user on local machine both on Windows and Linux
- Show the difference option of password require
- Test on **local security policy** to verify password identity
- Test create user, again to verify password option work



How to recover a lost Password?

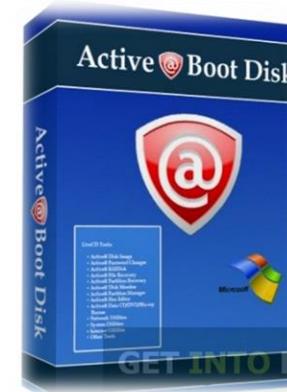


There are many tools for using recovery password on windows OS:

- ✓ Lazesoft Recovery Suite Media Builder
- ✓ Ative @boot disk



Lazesoft
Recovery Suite
4realtorrentz



How to recover a lost Password?



Laze soft Recovery Suite Media Builder

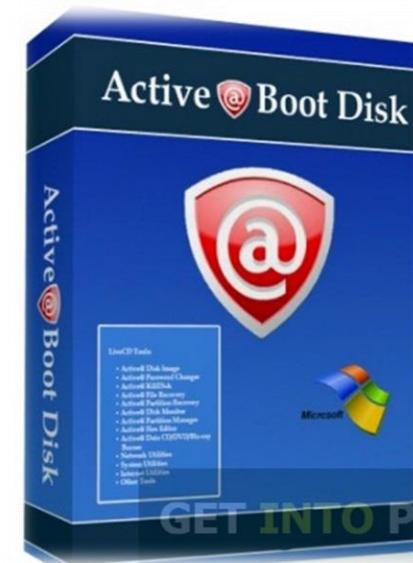
- ✓ Application for install on the PC
- ✓ Run application after install on PC
- ✓ Click Burn CD/USB disk Launch bootable media
- ✓ Choose option windows version
- ✓ Choose USB or CD/DVD for bootable
- ✓ Change boot order on BIOS
- ✓ Change password



How to recover a lost Password?



- **Active @boot disk**
 - ✓ Create bootable USB or CD/DVD
 - ✓ Select Active @boot disk extension ISO
 - ✓ After finished Bootable USB or CD/DVD
 - ✓ Change boot order choosing USB or CD/DVD
 - ✓ Change password and reset



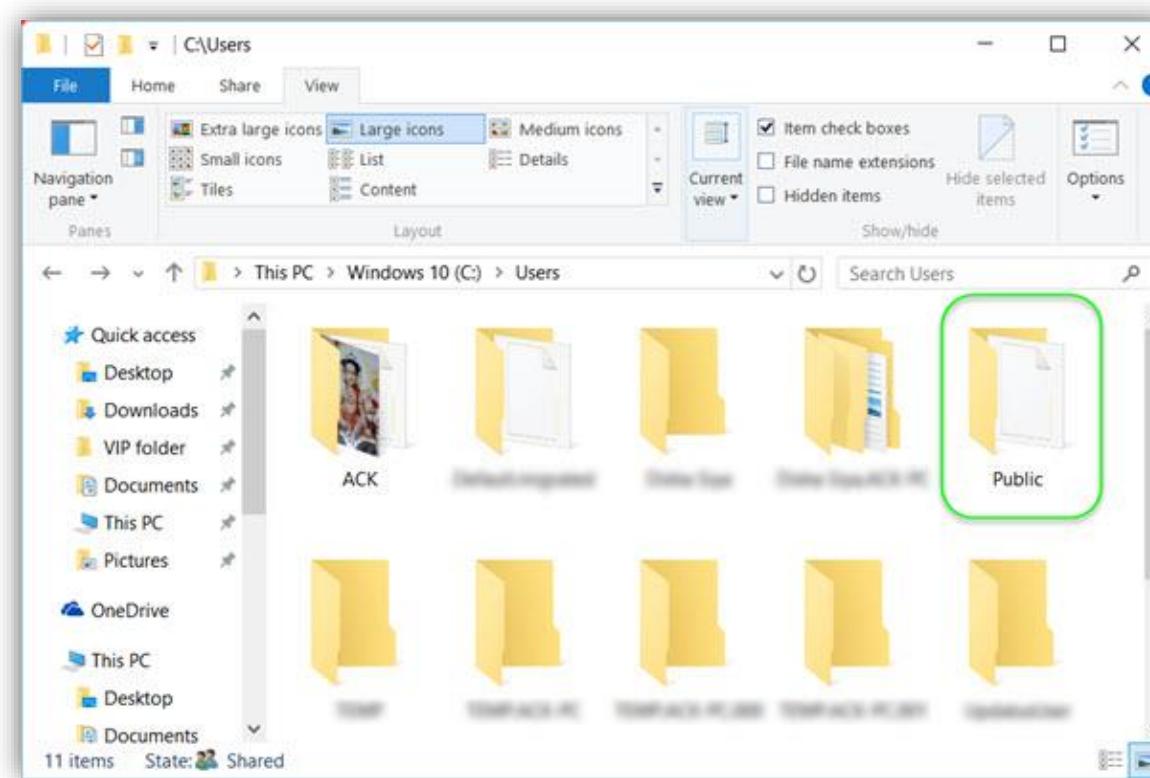
Instruction Demo

- Instructor demo about lost password and recovery by using tools active @boot disk and lazesoft recovery
- Testing for all the students to verify change password is working
- Test on VMware it's easy for showing



What are share folders and files?

- **Sharing a folders** are allows the remote users using the computers within the same network access the contents of the folder that is shared.



How to share folders and files?

1. As mentioned above, use an administrator account to log on to your Windows 10 PC.
2. Locate and right-click the folder that you want to share.
3. From the context menu, click **Properties**.
4. From the folder's properties box that opens up, go to the **Sharing** tab. From the displayed options, click **Share**.



(Cont.)How to share folders and files?

1. On the **File Sharing** box, in the available field, type the name of the user or group with whom you want to share the folder.
2. Click **Add**.
3. Once added to the list, you can click the down arrow for the user or group under the **Permission Level** column.
4. Choose the permission level that you want to set for the user/group on the shared folder. (Default is **Read**.)
5. Click **Done** to share the folder.



Summary

Create username on windows operating system

- Administrator user
- Standard user
- Guest user
- Recovery password on you operating system
- Active @boot disk
- Lazesoft recovery
- Share folders or files on windows just share on you computer chose every one group then test from other computer on the network to access their files.
- Remote computer tools
- RDP (Remote Desktop Protocol)
- Team Viewer application

ANY QUESTION

