

# Manage and Add Users with Linux

## Project description

In this scenario, a new employee with the username `researcher9` joins an organization. You have to add them to the system and continue to manage their access during their time with the organization. In this scenario, I will be using the `useradd`, `usermod`, `userdel` and `chown` command to manage user access in the Linux Bash shell.

This project summarizes how I demonstrated to add users, assign file ownership, add users to their respective group and secondary group, and delete a user:

- Not all users get access to the system
- New users are added to the system
- Current users who change groups or leave the organization are deleted from the system.

## Add a new user

A new employee has joined the Research department. In this task, I must add them to the system. The username assigned to them is `researcher9`.

```
analyst@4ca9afdd9ff7:~$ sudo useradd researcher9
analyst@4ca9afdd9ff7:~$ sudo usermod -g research_team researcher9
analyst@4ca9afdd9ff7:~$
```

- I used the `sudo useradd` command to add a user called `researcher9` to the system.
- The command `usermod` and `-g` option to add `researcher9` to the `research_team` group as their primary group.

## Assign file ownership

The new employee, `researcher9`, will take responsibility for `project_r`. In this process, I must make them the owner of the `project_r.txt` file.

The `project_r.txt` file is located in the `/home/researcher2/projects` directory, and owned by the `researcher2` user.

```
analyst@4ca9afdd9ff7:~$ sudo chown researcher9 /home/researcher2/projects/project_r.txt
analyst@4ca9afdd9ff7:~$
```

- I used the `chown` command to make `researcher9` the owner of `/home/researcher2/projects/project_r.txt`.

## Add the user to a secondary group

A couple of months later, this employee's role at the organization has changed, and they are working in both the Research and the Sales departments.

In this scenario, I must add `researcher9` to a secondary group (`sales_team`). Their primary group is still `research_team`.

```
analyst@4ca9afdd9ff7:~$ sudo usermod -a -G sales_team researcher9
analyst@4ca9afdd9ff7:~$
```

- I used the `usermod` command with the `-a` and `-G` options to add `researcher9` to the `sales_team` group as a secondary group.

## Delete a user

A year later, `researcher9`, decided to leave the company. In this task, you must remove them from the system.

```
analyst@4ca9afdd9ff7:~$ sudo userdel researcher9
userdel: group researcher9 not removed because it is not the primary group of
user researcher9.
analyst@4ca9afdd9ff7:~$ sudo groupdel researcher9
analyst@4ca9afdd9ff7:~$
```

- I used the `userdel` command to delete `researcher9` from the system. The output will be a message `Userdel: Group researcher9 not removed because it is not the primary group of user researcher9.`
- The `groupdel` command let me delete the `researcher9` group that is no longer required.