

**Fundamentals of UNIX**  
**Lab 8.3.3– User Identification Commands**  
***(Estimated time: 45 min.)***

**Objectives:**

- Determine who is logged on
- Switch to a different user's account
- Determine your real user identity
- Determine our effective user identity

**Background:**

In this lab, you will use advanced UNIX commands to determine your identity and the identity of other users logged on to a system. When you log on to a UNIX system, you use your Real User ID (e.g. user4). It is possible to switch temporarily to another users account for testing or access to files. When you have switched to the other users account it becomes your Effective User ID. In this lab, you will work with various commands that allow you to determine your Real User ID, your Effective User ID and switch between the two. You will also be able to find out who is logged on remotely to a UNIX system.

**Tools / Preparation:**

- a) Before starting this lab, review Chapter 8, Section 3 – Identifying Users
- b) You will need the following:
  - 1. A login user ID (e.g. user2) and password assigned by your instructor.
  - 2. A computer running the UNIX operating system with CDE
  - 3. Networked computers in classroom with class file system installed

**Notes:**

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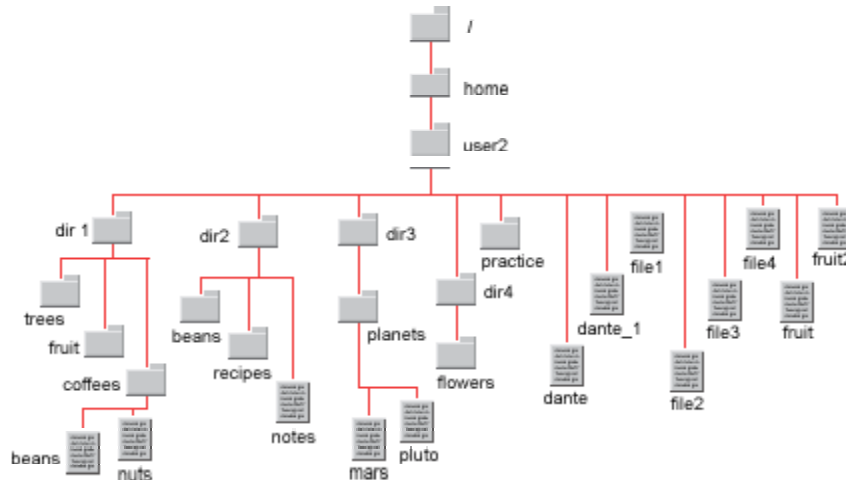
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**Fundamentals of UNIX**  
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**Worksheet**

Use the diagram of the sample Class File System directory tree to assist with this lab.

**Class File Tree Structure**



**Step 1. Log in to CDE**

Login with the user name and password assigned to you by your instructor in the CDE entry box.

**Step 2. Access the Command Line**

Right click on the **workspace** backdrop and click on **Tools**. Select **Terminal** from the menu to open a terminal window.

**Step 3. Determine Who is Logged on**

The **who** command displays information about all users currently logged on the local system. This command lists the user's name, terminal, login time, elapsed time since the last activity on the terminal line, and the machine (host) name the user logged on from. A UNIX workstation will typically have only one user logged in (the primary user) but a UNIX server can have many users logged in simultaneously.

If you are using CDE at your workstation with a terminal window your user ID may appear multiple times, one for the console, one for the CDE session and once for each terminal window you have open.

a. Use the **who** command to determine who is currently logged on to your system. Normally your user ID will be the only one listed. You may have other users listed if you they have an account on your system and are currently logged in. What was the result of the command?

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b. Use the **who -H** (headings) command to see who is currently logged on to your system with headings displayed. What are the headings displayed? \_\_\_\_\_

c. Use the **who -q** (quantity) command to see the user IDs of those logged on and a count of users. Note: your user ID may be counted twice if you are the only user logged in. What was the result of the command? \_\_\_\_\_

**Fundamentals of UNIX**  
**Lab 8.3.3– User Identification Commands**  
**Worksheet – Cont.**

d. **(Optional)** If there is a central UNIX server in the classroom with student login IDs defined on it, obtain the IP address of the server from your instructor and **telnet** (or **rlogin**) to the server. You will need to provide your login ID and a password to login remotely. Issue the **who** command on the remote server. Who else is logged in? \_\_\_\_\_

**Command format:** **telnet ip-address** (ip address is the 32-bit address of the server)

e. **(Optional)** If you have other user accounts defined on your workstation, have one of your lab partners telnet to the IP address of your workstation and login remotely. Check you're your instructor if you do not know your IP address. Use the **who** command to see the user IDs of those logged on. Who else is logged in? \_\_\_\_\_

**Step 4. Switch to a Different User's Account**

You can temporarily switch to another user account to access files and directories that belong to that user by using the **su** (switch user) command. When switched to another users account you will have access to all of the same files that they have. To switch user IDs, you must supply the password of the user ID you are switching to unless you are currently logged in as root. When you switch to another user account, you become that user and have all access and privileges that they have. To switch back to your previous user ID, type **exit**.

The format of the **su** command is shown below. If the optional dash (-) is used, you will switch to another UID and have the system read the new user's initialization files. This will allow you to have the same environment as they do. If you do not use the dash, you will have access to their files but you will retain your own environment.

**Command format:** **su [-] username**

a. Use the **su** command **without the dash (-)** option and switch to another user account that is setup on your workstation (guest or userZ). What command did you use? **su userZ**. What were you prompted for? \_\_\_\_\_

b. Enter the command to verify your current directory. What is your current directory?  
\_\_\_\_\_. Switch back to your own user account by typing **exit** at the command line.

c. Use the **su** command **with the dash (-)** option and switch to another user account that is setup on your workstation (guest or userZ). What command did you use? \_\_\_\_\_

d. Enter the command to verify your current directory. What is your current directory?  
\_\_\_\_\_. Switch back to your own user account by typing **exit** at the command line.

**Step 5. Determine Your Real User ID**

The login id that you use to initially login to a UNIX system is your **Real User ID (RUID)**. The **who am i** command can be used to help determine your Real User Identity (RUID) when working with different user accounts:

**who am i** - Displays login ID, Terminal, Date/Time logged on and Machine name

**Fundamentals of UNIX**  
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**Worksheet – Cont.**

- a. Use the **su** command and switch to another user account that is setup on your workstation (guest or userZ). What command did you use? \_\_\_\_\_
- b. Use the **who am i** command to determine your Real User ID. This should be your original login ID. What was the result of the command? \_\_\_\_\_
- c. Switch back to your own user account by typing **exit** at the command line. Type **whoami** again. What was the result of the command? \_\_\_\_\_

**Step 6. Determine Your Effective User ID**

When you switch to another user's ID you will have the characteristics and permissions of the account you switched to and this is now your **Effective User ID (EUID)**. The **who am i** command shows your **Real User ID (RUID)**. The **whoami** and **id** command shows your **Effective User ID (EUID)** and the primary group you are a member of. The **id** command can also be used with the **-a** (all) option to show all groups the effective user is a member of.

- a. Use the **su** command and switch to another user account that is setup on your workstation (guest or userZ). What command did you use? \_\_\_\_\_
- b. Use the **id** command to determine your Effective User ID. This should be the user ID you switched to. What was the result of the command? \_\_\_\_\_
- c. Use the **whoami** command to determine your Effective User ID. This should also be your original login ID. (**Hint:** you may have to enter the fully qualified command name for **whoami**: **/usr/ucb/whoami**) What was the result of the command? \_\_\_\_\_
- d. Use the **id -a** command to determine your Effective User ID. This should be the user ID you switched to. It will also show you the primary group and any **other** groups this Effective User ID is a member of (if any). What was the result of the command?  
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- e. Switch back to your own user account by typing **exit** at the command line. Type **id** again. What was the result of the command?  
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**Step 7. Close the Terminal Window and Logout**

Double click on the dash button in the upper left corner of the screen, then click the **EXIT** icon on the front panel.