

# Getting Started

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# Learning Objectives

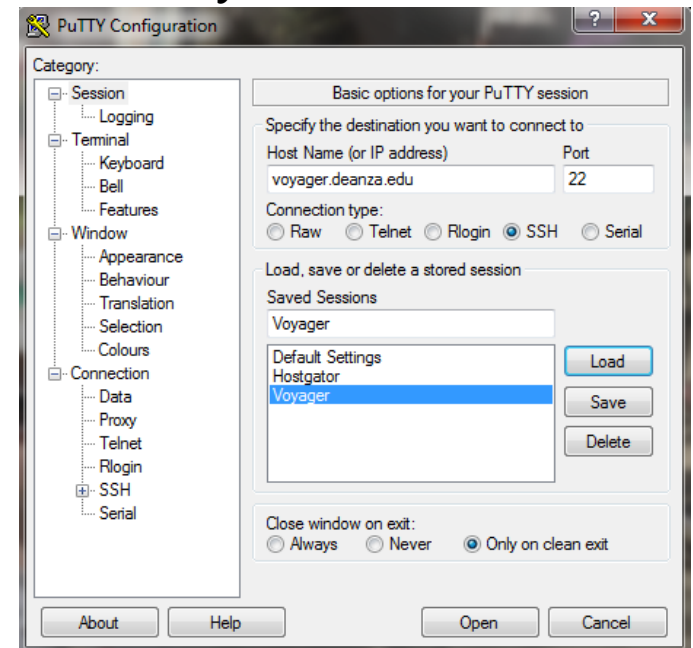
- Connect to the Linux system
- Login authentication
- Issue commands
- Find documentation
- Display system information

# Accessing Linux

- Option 1 – Walk to the ACT Lab
  - Choose among Windows, Mac OS X, and Linux
- Option 2 – Remote login with Secure Shell (SSH)
  - Utility to connect to remote servers
  - Can run commands, copy files, etc.
  - Require account on remote server
  - Provide a secure, encrypted connection
  - Requires SSH client

# Using SSH to Reach Voyager ( Windows)

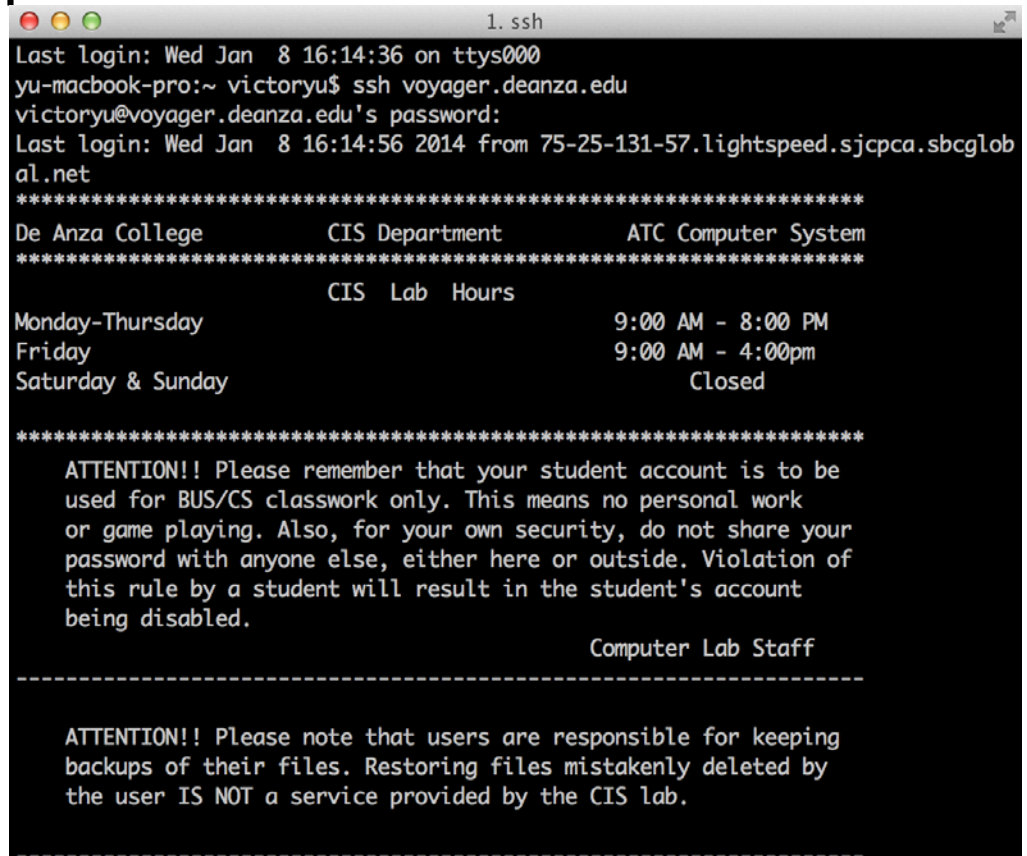
- PuTTY is a free SSH client
  - Single file to download. Just run putty.exe
  - Lots of options available (generally unnecessary)
- SecureCRT
  - Free from [Umass OIT](#)



# Using SSH to Reach Voyager (OS X)

- Open terminal and type

- `ssh voyager.deanza.edu`



```
1. ssh
Last login: Wed Jan  8 16:14:36 on ttys000
yu-macbook-pro:~ victoryu$ ssh voyager.deanza.edu
victoryu@voyager.deanza.edu's password:
Last login: Wed Jan  8 16:14:56 2014 from 75-25-131-57.lightspeed.sjcpcal.net

*****
De Anza College          CIS Department          ATC Computer System
*****

          CIS Lab Hours

Monday-Thursday          9:00 AM - 8:00 PM
Friday                    9:00 AM - 4:00pm
Saturday & Sunday        Closed

*****

ATTENTION!! Please remember that your student account is to be
used for BUS/CS classwork only. This means no personal work
or game playing. Also, for your own security, do not share your
password with anyone else, either here or outside. Violation of
this rule by a student will result in the student's account
being disabled.

                                Computer Lab Staff

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ATTENTION!! Please note that users are responsible for keeping
backups of their files. Restoring files mistakenly deleted by
the user IS NOT a service provided by the CIS lab.

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```

# Verifying SSH Server Identity

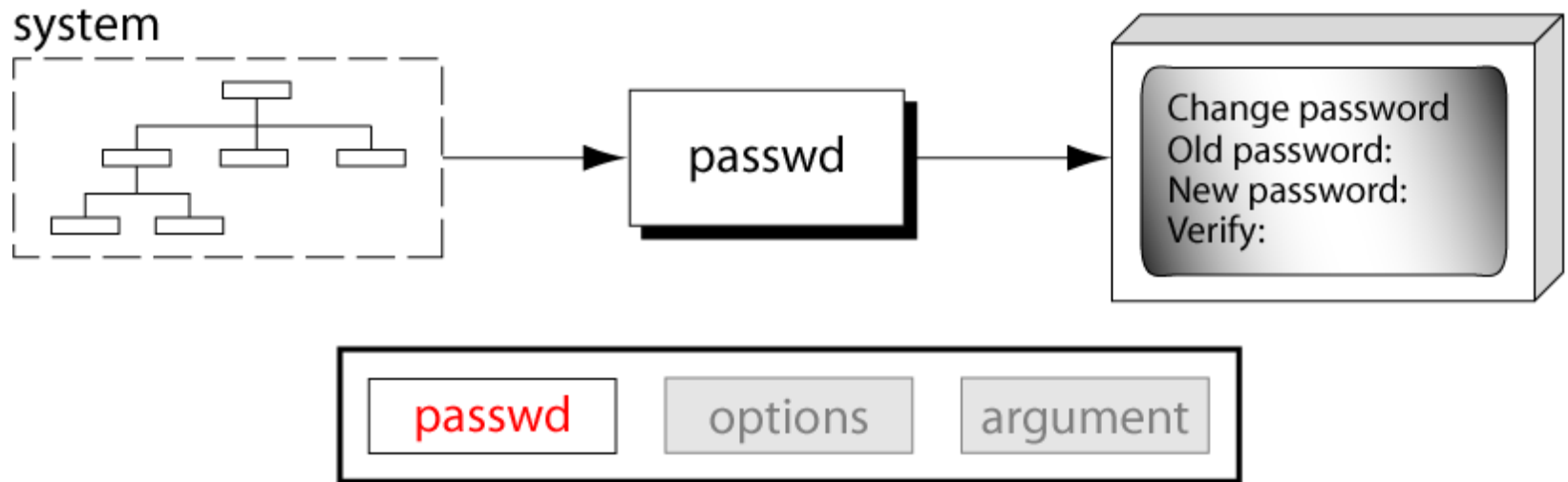
- Must verify server identity the first time you connect
- Every server has a unique RSA fingerprint
- Generally you can trust that the server is correct. So just type "yes"
- Only will ask the first time you connect to the server, or if the server changes.



# Login

- The process of identifying yourself to the system
- Linux keeps track of login activities
- Once logged in, the shell starts

# Change Password



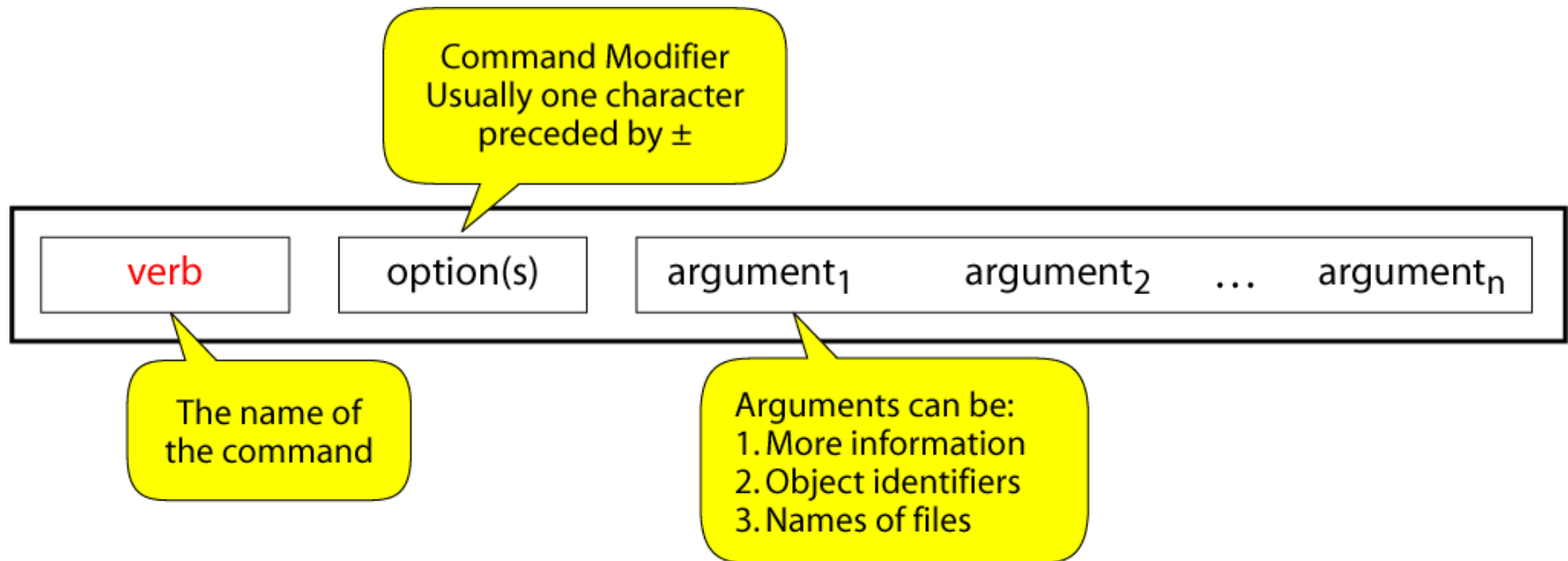




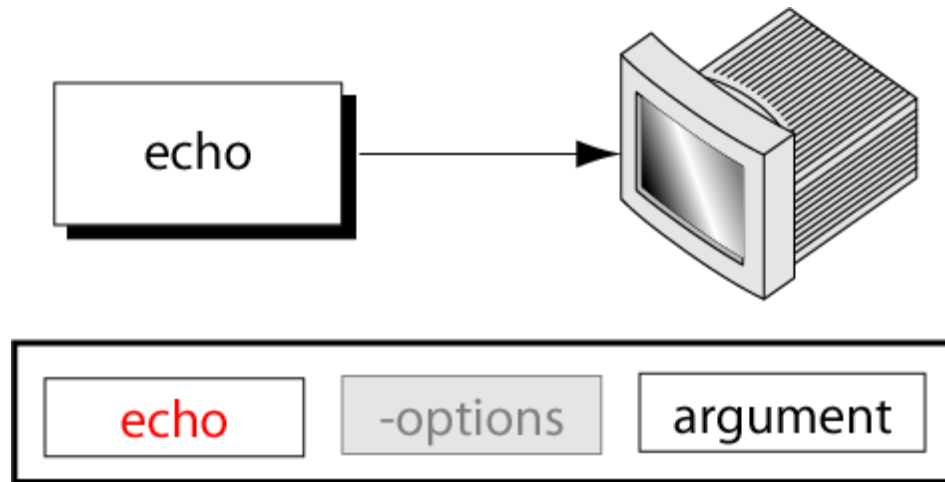
# Lowdown on Passwords

- Protect your password
- At least 6 characters long
- Choose a hard-to-guess password
- Include non-alphanumeric
- Auto generate password using  
pwgen

# General Command Format

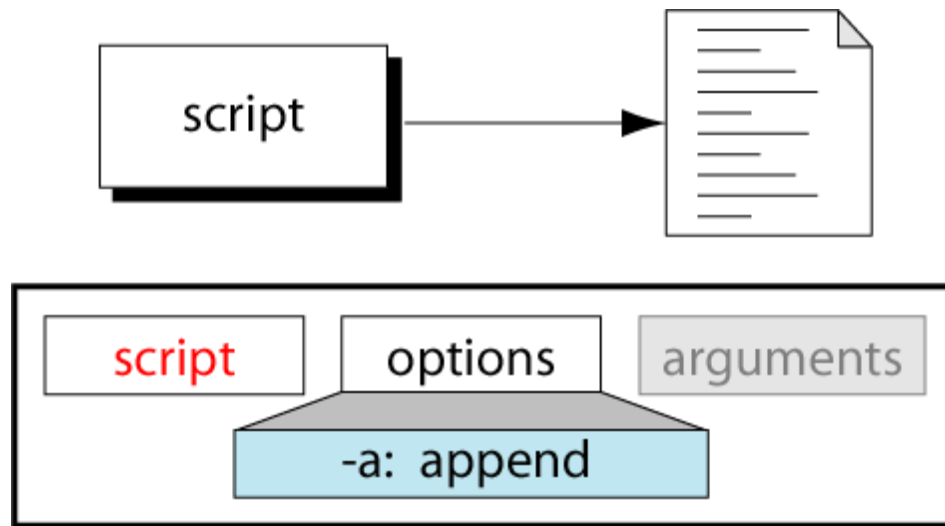


# The echo Command



- `echo` is one the bash builtins
- `echo` writes stuff to the terminal

# Record a Session with `script`





# Edit Command Line

- Erase a character
  - BACKSPACE
  - DEL
  - CONTROL-H
- Delete a word
- Delete a line
- Repeat a command



# Some Command Line Tips

- Press <TAB> to auto complete a command, file name, etc.
- Press Up and Down to scroll through recently run commands

# Abort Execution

- To terminate a running program:
  - CTRL-C
  - Or sometimes DEL



# Control Key Commands

**ctrl-s** freezes the screen and stops any display on the screen from continuing (equivalent to a no-scroll key) (sometimes takes a moment to work)

**ctrl-q** un-freezes the screen and lets screen display continue

**ctrl-c** interrupts a running program

**ctrl-\** same as ctrl-c but stronger (used when terminal doesn't respond)

**ctrl-z** suspends a running program (use the fg command to continue the program)

**ctrl-h** deletes last character typed

**ctrl-w** deletes last word typed

**ctrl-u** deletes last line typed

**ctrl-r** redraws last line typed

**ctrl-d** ends text input for many UNIX programs, including mail and write.

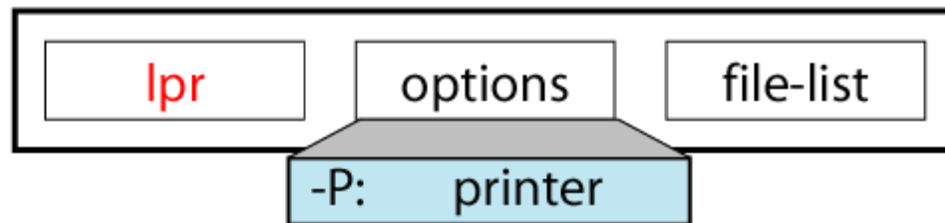
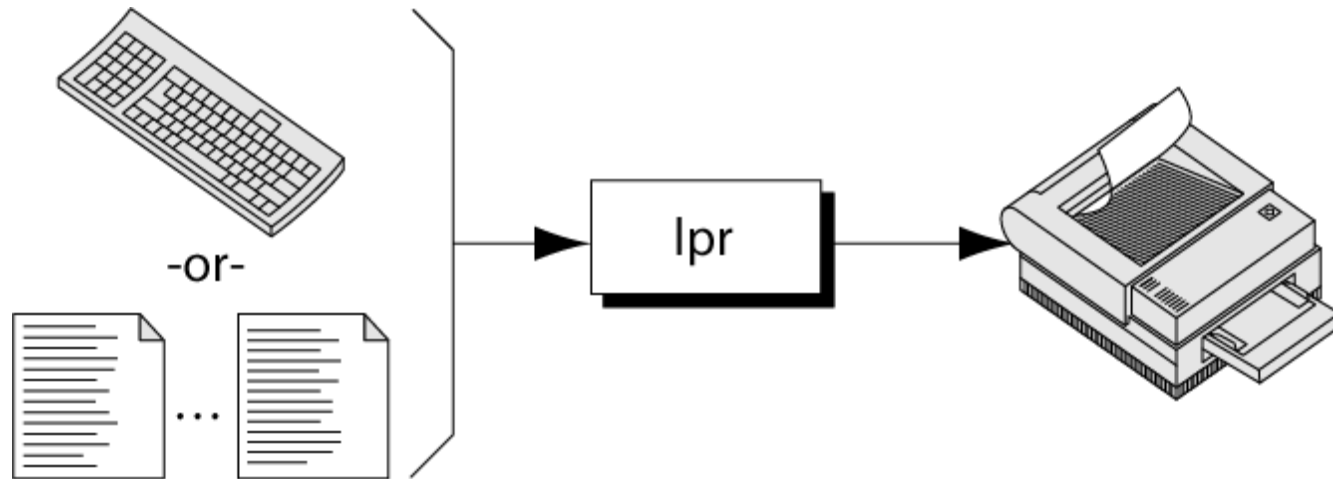




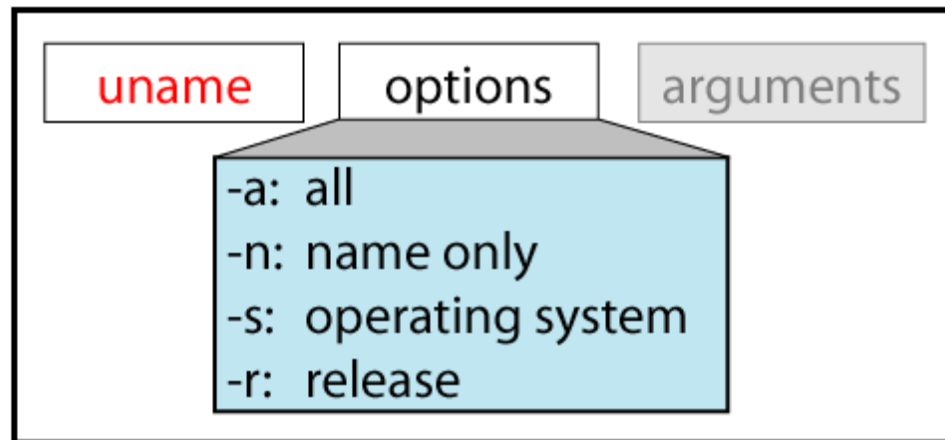
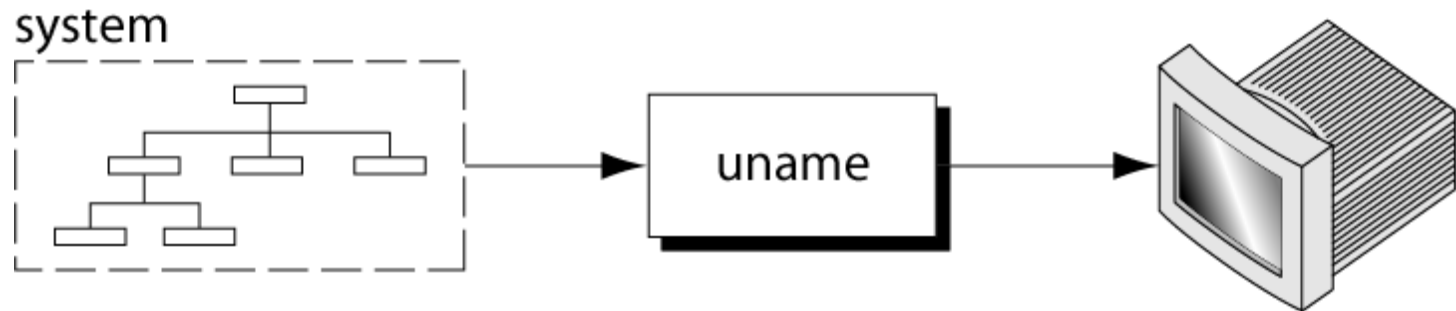
# Get Help with man

- To access a man page:
  - `man [command]`
- To find a specific man page:
  - `man -k [command]`
  - `man 1 [command]`
- Alternatively, use:
  - `apropos [command]`
  - `whatism [command]`

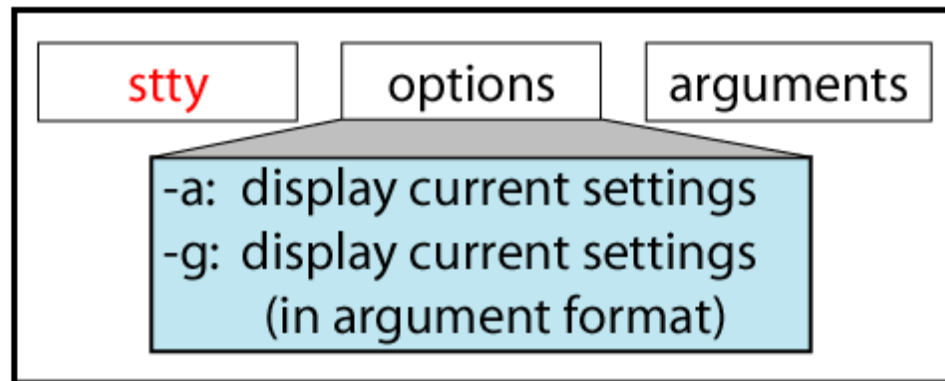
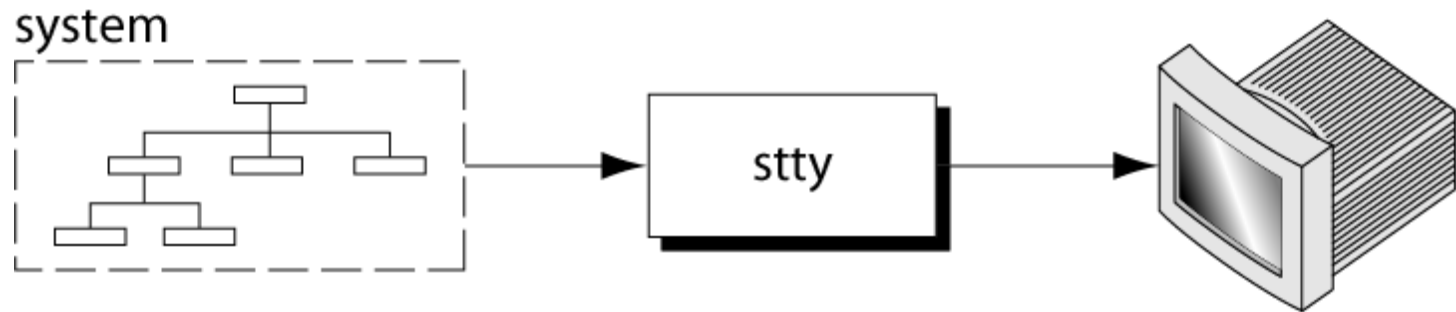
# The lpr Command



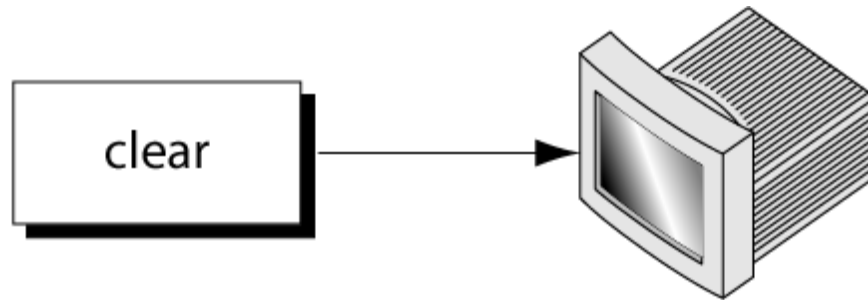
# The `uname` Command



# Fixing Terminal Setting with `stty`



# The `clear` Command





# Log Out

- Logout – Exit a login shell
- Or `exit`
- Or `quit`