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# Content

## Overview of Clusters

Carnegie Mellon has a variety of computer labs, called “Clusters”, available for campus use.

Computing Services' Clusters provides and supports technology rich environments and access to software for:

* Academic classes
* Student learning and research activities
* University-sponsored events

**Teaching and Learning Spaces**

Clusters provide technology rich spaces for classes to take place, as well as providing a location for you to complete academic work, meet with peers, and access resources you need.

**Software Access**

Cluster Services has Mac, Windows and Linux computers available for campus use, as well as peripherals such as printers, scanners, and other hardware. In addition, clusters provide access to specialized software that you may need for your class or projects.

**WebStations**

The University Center and the College of Fine Arts Multimedia Cluster have a small number of machines at stand-up counters that are not full Cluster Computers.

These machines, called WebStations, are maintained and managed by Cluster Services, but do not have the same complement of software and peripherals as a normal Cluster Computer.

WebStations have a time limit of 15 minutes, and are located in areas where foot traffic and printing traffic are high. These are currently located in the University Center, Kirr Commons and the College of Fine Arts 300 corridor. (CFA will be coming by Fall 2010, we hope) You can print and view a variety of formats, check your email, blackboard and other web resources.

You can NOT make changes to any documents, nor can you access documents from your AFS or MyFiles space. WebStations are only intended for quick email, fact checking, and printing.

## Cluster Availability and Resources

Computing Services Clusters are located in Baker Hall, the College of Fine Arts Building, Cyert Hall, Hunt Library, Morewood Gardens, Wean Hall and West Wing. Computing Services ensures that hardware, software, and support are available at the clusters indicated below for general campus use. 

These spaces are open to every student on campus and have different resources available, depending on the location and focus of the Cluster.

**Reserved Clusters**

Most Computing services clusters are reserved for academic classes and other events.

These spaces, generally located in core academic and administrative buildings, have projection, instructor laptop connection, and whiteboards available for teaching. Faculty or staff can reserve a cluster for an academic or professional development class. Carnegie Mellon students can also reserve clusters during available times for community service projects.

The clusters reservations schedule can be located at <http://www.cmu.edu/computing/clusters/reserve/index.html>

**Learning Spaces**

Clusters located in dormitories (Morewood Gardens, West Wing) and the Linux machines located near the entrance to Hunt Lower Level can not be reserved. These facilities are open to students when these buildings are open (generally 24X7) to provide access to space, software, and peripherals without the constraints of academic classes.

Collaborative workspace amenities

The West Wing Collaborative cluster is outfitted with specific technologies, room design, and other amenities to foster collaboration between students. The recently updated West Wing cluster is a student-focused, computer centric and aesthetically pleasing workspace. This clusteroffers improved furniture layouts, varied seating arrangements and an open space for collaboration. West Wing is not available for reservations, thus allowing students extended accessibility.

A Virtual Tour of West Wing is available at <http://www.cmu.edu/computing/clusters/facilities/west-wing/index.html>

**What’s in a Cluster?**

Printing:

All Computing Services clusters have a nearby Andrew Printer. Color and tabloid printing are available at some cluster locations. Please see the Andrew Printing section of C@CM for more information.

Peripherals:

Card readers are available at most cluster locations. Card readers will allow you to read your SD, MicroSD or other format media cards. These cards are sometimes used in digital cameras, mp3 players or other devices. The specific formats available are on the Clusters website, in each facility.

MSW-> Why are certain formats for card readers only available at some locations?

As Cluster Services upgrades the desktop computer hardware, we also upgrade the card readers in each location. As the new card readers come out, the most current card media formats are supported.

Scanners are located at many cluster locations so that students can scan in photographs and print media. The map above indicates where scanners are located by using a small scanner icon.

Learning Activity, how to use the clusters map-> What locations have scanners according to the map?

Multimedia Facilities & Lending

Wacom tablets and other fine arts technologies are available at the CFA Multimedia Studio Cluster. Tablets are available at each desktop computer in the CFA 317, 318 and 323 clusters and allow for stylus based input to various programs on these computers. In addition, the CFA cluster also has multimedia equipment available for loan.

The CFA Multimedia Studio Cluster also has a sound editing room in CFA 321 that contains a Mac workstation, keyboard and a sound proof booth for recording.

Clusters Multimedia lending program is administered out of the CFA Cluster. The Multimedia lending program makes video and still cameras, microphones, tripods, and other multimedia recording equipment available to all of campus. <http://www.cmu.edu/computing/clusters/lending.html>

In order to check out multimedia equipment, you must first submit a lending application and have your CMU ID must be activated. The CFA lending office is located at the CFA Cluster CCon office: College of Fine Arts building room 322

**Computing Services Partner Spaces**

Computing Services partners with departments on campus to provide all students with access to some spaces.

* School of Music facilities: CFA, Margaret Morrison
* School of Computer Science: Gates 3rd and 5th floors

MSW: Departmental Clusters ->

Some departments have their own clusters or computer labs that may be open to everyone, students in that department, or students registered for specific classes. You should contact your home school or department for information on what resources are available to you as a member of that school.

**When can I use a cluster?**

* Most clusters are available 24X7 during the academic semester.
* Exceptions include:
	+ Many Clusters are scheduled for courses. The clusters reservations schedule can be located at <http://www.cmu.edu/computing/clusters/reserve/index.html>
	+ Some Clusters with restricted access
		- Hunt Library Lower Level is only available during the hours Hunt Library is open.
		- The School of Music editing suites are restricted access. Please contact the School of Music for more information about obtaining access. <http://www.cmu.edu/computing/clusters/facilities/music.html>
		- The CFA 321 sound editing room is only available when the CFA cluster is staffed. Staffing information is available at <http://www.cmu.edu/computing/clusters/facilities/hours.html>

## Software Access

These clusters have Mac, Windows and Linux computers with different sets of software, depending on location. More information about what software is available on the Cluster Services website, and is updated semesterly. <http://www.cmu.edu/computing/clusters/software/index.html>

File Storage:

Students can access the personal file storage locations allocated to them by the university. Available of file storage varies by technology and operating system. The chart below gives an overview of where you can access what files. More information is available in the file storage section of the C@CM course

|  |  |  |  |
| --- | --- | --- | --- |
|  | Linux | Macintosh | Windows |
| Andrew File Storage (AFS) | Available | Available | SSH or SFTP access |
| MyFiles | Not Available | Available | Available |

## Tools & Help

How do I get help with using clusters?

* + - I’m having problems with a cluster resource! What information do I need to report?
			* What cluster resource are you using? (A piece of hardware? A software application or file access service? Environmental or facilities questions?)
			* Where are you located?
				+ Finding out what computer you are on, or what space you are in
				+ What locations are staffed?
			* What symptoms are you seeing? What did you expect to see?
		- Now I know what I need to ask about. Who do I ask?
			* Ask a CCon: Staffed locations, CCon phone number, CCon hours
			* As a Clusters Staff Member: Wean & CFA hours during the academic year
			* Ask the Help Center: Email/Phone, Help Center Hours, walk-in
			* Hours are different during summer and winter breaks (Many Students Wonder)
	+ Tools Review:
		- People: CCons, Help Center Staff, Cluster Staff
		- Web: Cluster Website, Cluster Reservations, Cluster Map, Cluster Software List
		- Multimedia: Sound Room, Multimedia Lending, CFA Cluster

## Putting it All Together

Clusters have technology rich space full of technologies that you can use and maybe required to use for yoru academic work here at Carnegie Mellon.

In addition, Cluster Services provides WebStations for quick web, email and printing access, and maintain the Andrew Printing system for use in Clusters, near WebStations and in other campus locations.

We’ve talked about how clusters operate, what’s available, and how to find information about the resources that you need. The following are some activities designed to help you make use of this information so that you can find what you need, when you need it.

**Activities:**

* Here are some scenarios that you may find yourself in during your career here at CMU. What Cluster resources would you use to make sure you are getting what you need?
	+ - You are taking a statistics class. You have a homework assignment due Friday at 5pm, and to complete it, you need to use Minitab, and you are a Windows user. It’s Thursday at 1pm. When can you plan to access Minitab and complete your assignment?
			* Which Clusters have Minitab?
				+ Clusters Software Website Mockup
			* Which Clusters are available between now and 5pm Friday?
				+ Clusters Reservations Site Mockup
			* Which Cluster has Minitab running on Windows and is open for you to use?
				+ Maybe this is a multiple choice question?
			* Which web resources did you need to make this decision?
				+ Maybe this is a multiple choice question?
		- You are in a class that has a group project. You need to meet to discuss your assignment tonight, so that you can turn in your assignment by midnight. This class uses Photoshop, and your team requires a scanner to scan in photographs for the assignment.
			* Which Operating Systems can you use to access Photoshop?
			* Which clusters do you think are ideal for you to meet in?
				+ West Wing: Has all of these and is set up for collaborative work.
			* Given the reservations calendar above, which clusters should you avoid?
				+ Baker Hall 140C is reserved for a class for the rest of the day.
		- Your greek organization wants to make a video for Rush. You know you have some footage of their annual philanthropy and that you’d like to record some video of the members getting ready for Fall Rush events, as well as voiceovers.
			* Where can you get a videocamera?
				+ CFA Multimedia Lending
			* What do you need to do to get access?
				+ Complete and submit the on-line CFA Lending Access Request Form.
				+ Print and sign this form as instructed upon submitting. You will be notified via email once your submission has been accepted.
			* Where can you do voice-over work on top of your video?
				+ CFA 321
			* How do you get help?
				+ The CCon on duty