Winter 2016 Quarterly Report Computer Lab Management

Prepared by Tim Leamy

Computer Lab Management (CLM) operates 20 computer rooms across the UC Davis campus. These consist of 14 computer classrooms and 6 open access labs with a total of 622 installed stations. CLM also manages seven departmental computer rooms with 199 installed stations for the School of Education, the UC Davis Language Center, and The Arts Admin Group.

The demand for computer classrooms remains high and the rooms are essentially booked to capacity. We foresee additional demand due to both the 2020 Initiative and as faculty members integrate more computer-centric methods into their classroom teaching. Therefore, CLM is continuing to look for ways to add computer classrooms.

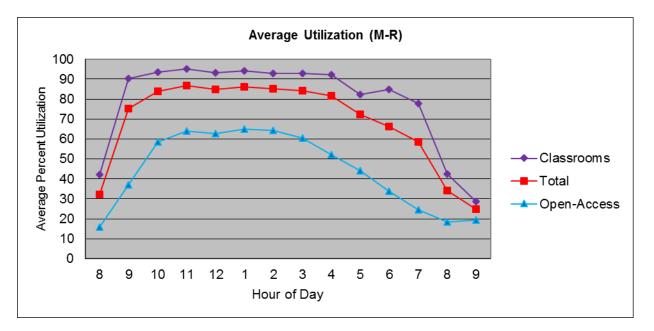
Some of the significant items from Winter 2016 include:

- During Winter 2016 there were 5,907 class hours reserved in the computer classrooms. This was the second highest quarterly reserved hours in CLM history after 6,212 hours in Fall 2015. CLM added two new computer classrooms in the Shields Library in Winter 2014 which greatly contributed to the increase. However, the new Shields classrooms only account for some of the increase. The remaining growth can be attributed to the 2020 Initiative and faculty members integrating more computer-centric methods into their classroom teaching.
- The number of logins has remained fairly consistent over the past few years, but is lower than the peak in 08-09. The number of unique users is slowly increasing, most likely keeping pace with the increasing number of students. The decrease in number of logins has several likely causes:
 - Increased ownership of laptops and smartphones reducing student need for accessing the computer rooms.
 - The Fall 2009 printing rate change decreased printing demand and therefore logins.
 - Increased reserved class hours reducing the time available for drop-in student use.
 - Decrease of open hours CLM dramatically cut evening and weekend available hours in response to budget issues
- CLM upgraded the printers in 2101, 2012 and 2103 SCC to Dell B5460dn printers. The new printers are faster and can process complex print jobs better.
- CLM conducted a student survey about computer room use. The results are posted at http://clm.ucdavis.edu/pubs/survey/student-w16.html.

Utilization

Overall Computer Room Utilization

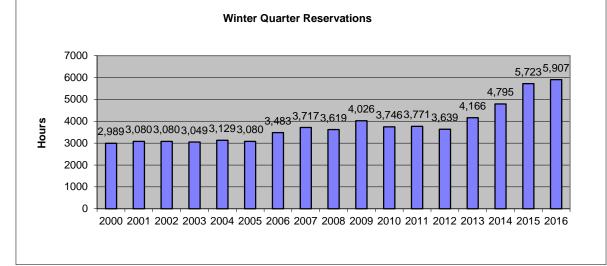
Computer Lab Management operates 20 computer rooms at UC Davis. These computer rooms experience high utilization during peak hours (9:00am to 6:00pm). Most open access labs also experience wait lines. The graph below combines utilization Monday through Thursday.



Classroom use is very high – averaging over 90% from 9am-5pm. Open-access utilization is lower, but since it is an average across the entire quarter it doesn't give a sense of peak use. Many of the open-access labs also experience wait lines during busy times of the quarter. The maximum wait line was 32 people waiting for a computer on February 16th.

Class Use

During Winter 2016 there were 5,907 class hours reserved in the computer classrooms. This is the highest amount for a Winter quarter in CLM history. The large increase from 2013 is primarily due to adding two more classrooms in Shields Library.



In addition, there were 218 class software installs and 167 class folders created during Winter 2016.

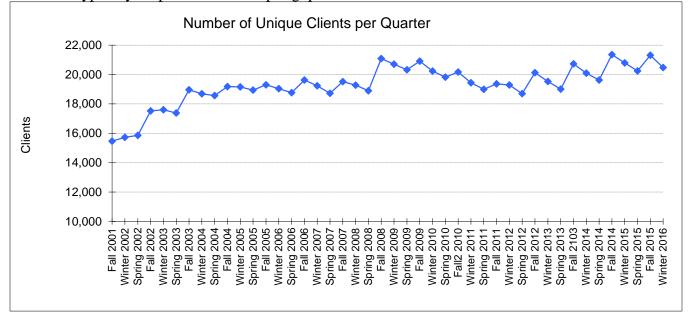
Number of Logins and Users

Total logins per quarter 450,000 400,000 350,000 300,000 Logins 250.000 200,000 150,000 100,000 50,000 0 Winter 2006 Fall 2006 Fall 2006 Winter 2007 Spring 2007 Winter 2008 Spring 2009 Spring 2009 Fall 2010 Fall 2010 Fall 2011 Spring 2011 Fall 2011 Winter 2004 Spring 2004 Fall 2004 Winter 2005 Spring 2005 Fall 2005 Winter 2014 Spring 2014 Fall 2014 'inter 2003 pring 2003 Fall 2003 Spring 2012 Fall 2012 2002 Winter 2013 Spring 2013 2015 2016 2002 2015 2002 Winter 2012 Fall 2103 Winter 2015 2001 Winter 2 Spring 2 Fall 2 Winter 2 Spring 2 Spring 2 Fall Vinter

The total logins in Winter 2016 decreased to 248,667, a 6.6% drop from Fall 2015.

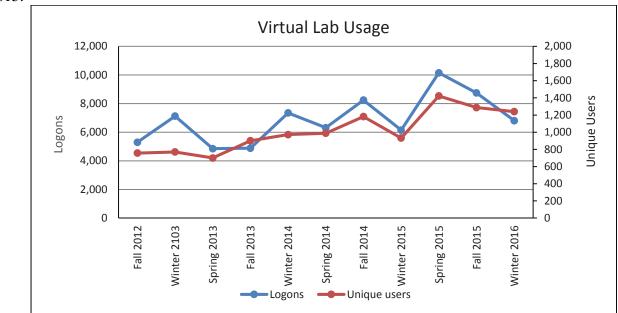
Unique Users

The number of unique clients decreased to 20,477 in Winter 2016. Of these, 19,947 were students. This is a decrease of 841 clients from Fall 2015. The decrease is normal as the total number of students at UC Davis typically drops from Fall to Spring quarter.



Virtual Lab Users

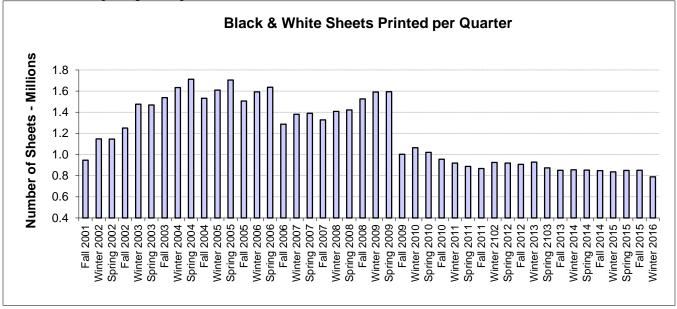
The IET Virtual Lab was used 6,805 times by 1,240 unique clients. Both values are a drop from Fall 2015.

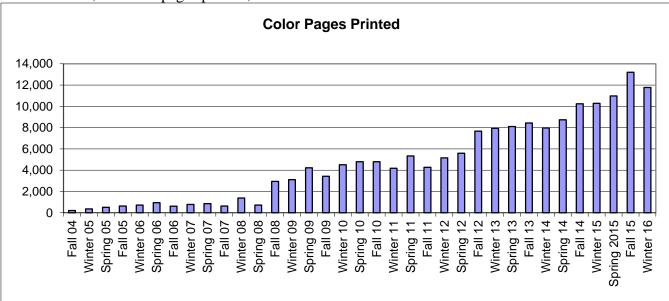


There were 599 denied connections to the virtual lab since there were no free stations. Most denied connections were during the day when there are only very limited number for computers available. The denied sessions dropped dramatically from Spring 2015 since CLM added computers in Summer 2015 to make more stations available during the day.

Printing

There were 788,432 total sheets printed in Winter 2016, an decrease of 7.3% from Fall 2015. The average sheets printed per client (of those who printed) was 45.44. The large decrease from 08-09 was due to the change in printing rates at the start of Fall 2009.





There were 11,772 color pages printed, a decrease of 10.9% from Fall 2015.

There were 3,748 wireless print jobs, an increase of slight 76 from Fall 2015. There were 485 unique clients who printed though the wireless printing system.

