Overview
The UO Blackboard course management system is managed by the Library Center for Educational Technologies, in collaboration with UO Information Services. It provides a central location for online course materials and a tool for implementing online components in UO courses. The UO licenses the Blackboard Learning System Enterprise edition from Blackboard, Inc. This note is an update on Blackboard status written for the Blackboard Advisory Committee meeting of 10 May 07.

Blackboard usage to date
Blackboard overall usage for spring term is consistent with previous patterns. As of 30 April:

<table>
<thead>
<tr>
<th></th>
<th>200603</th>
</tr>
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<tbody>
<tr>
<td>Active spring-term coursesites</td>
<td>1277</td>
</tr>
<tr>
<td>Students in at least one active coursesite</td>
<td>16498</td>
</tr>
<tr>
<td>Total student coursesite enrollments</td>
<td>47108</td>
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</tbody>
</table>

Overall, the number of coursesites using Blackboard continues to grow year over year; for example, there were 1092 available coursesites at the end of 200503 so this term’s preliminary data represents 12% annual growth. We seem to be stabilizing in terms of number of students, though, suggesting that continued growth is mostly in small courses, sections, graduate seminars, etc.

Regularly scheduled downtime
We’ve been sticking closely to our schedule of regular downtime. To help manage that downtime schedule, we created a new web page, [http://libweb.uoregon.edu/cet/blackboard/schedule.html](http://libweb.uoregon.edu/cet/blackboard/schedule.html), that lists currently scheduled downtime. We had originally believed that we needed to take downtime on Mar 10 to install patches to address the change in daylight savings time rules, but we managed to avoid that downtime by installing the patches during regular system backup. As announced, we took downtime during spring break, most of the day Wednesday, Mar 28. During that downtime Tim performed several upgrades, including:

- Oracle upgrade to 9.2.0.8 plus latest security patches
- application server version upgrades, to Red Hat Enterprise Linux 4.0 and Java 1.5.0.11
- install sign-up tool building block
- miscellaneous filesystem and database cleanup

We are anticipating additional downtime for various upgrades. As usual, our major upgrade times will be Saturdays in August and September, with further downtime scheduled for next winter vacation and next spring vacation.

Unscheduled downtime
We experienced several brief unscheduled periods of partial unavailability, though the system as a whole had no unscheduled outages:

- On Feb 6, some people were temporarily unable to log in due to a glitch in the data being provided by Banner.
• Starting approximately Feb 11, the UO streaming media server experienced serious technical problems. Any streaming media linked to from Blackboard was temporarily unavailable. Full service was restored on Feb 21, though occasional problems have recurred since then.

• On Apr 3, problems with the Computing Center radius server resulted in a period of about an hour during which many people were unable to log in to Blackboard.

• Starting probably on Mar 28, and resolved April 6, users who attempted to connect from Blackboard to the library’s ereserve system were unable to do so.

Other winter events of note

We did not convert Blackboard authentication to use LDAP as we had previously planned. Late in March we learned from the Computing Center that the LDAP project needed more time before going live. Tim and JQ are currently tracking the project, with the hope that we will convert to LDAP authentication during August. Best estimates are that Information Services will likely convert email and Radius authentication to the new LDAP system in late spring. Since Blackboard uses Radius authentication, this means that we will start authenticating against the set of “duck IDs” rather than email addresses at that time.

The UO Blackboard contract has been renewed for an additional year.

The Psychology Department completed the one-term experiment using the TurnItIn antiplagiarism plugin. Mike Wehr, who oversaw the experiment, reports that “it worked great for me and my students, and it actually caught someone. So it was both easy to use and effective.” Based on his own experience, he believes that the UO would do well to spend the estimated $20K/year for a one year site license. He plans to collect further data from his colleagues.

One new feature of interest is the “bFree” Blackboard coursesite export tool, a Java program that can convert exported blackboard ZIP files to usable form. See http://libweb.uoregon.edu/dc/blackboard/faq/?action=artikel&cat=2&id=62. Previously, the proprietary format of exported blackboard coursesites made it unappealing to use the “Export Course” command, but with this tool we expect to encourage greater use of export as a way to self-archive blackboard sites and repurpose blackboard content.

There is somewhat increasing interest in the use of Blackboard course cartridges, which are typically publisher-provided content that they load into our Blackboard system. In particular, several faculty in Economics are using such cartridges. In some cases the cartridges are simply additional rich content that could almost as easily be provided by the instructor. In others, the content is tied to purchase of the textbook, and the students can only use the blackboard site if they have a license key they have purchased with their text. In still other cases, the content on our site links to an external website that is the actual course material. This last model also applies to WebAssign, which continues to be heavily used in Math and Chemistry.

As reported in previous email, I investigated the idea of changing the way courses are disabled at the end of a term. I conducted a survey of all instructors from fall term, and got reasonably high response rates – about 75 responses. A heavy majority of respondents liked or had no objection to the idea of changing Blackboard to allow continued guest access to old coursesites. However, when we looked at our options more closely Tim and I decided that this was not a change we were ready to make over spring break. The major issue is that if we made the change faculty would not have easily available indicators of who had access to old coursesites, so the risk of confusion would be high.
At the request of Undergraduate Studies, I also contacted all faculty who had taught courses fall 2006 that satisfied the UO multicultural requirement. The undergraduate education committee is reviewing such courses, and has had difficulty obtaining syllabi. Of the 52 courses, I got responses from 39 faculty with permission to collect syllabi from blackboard and pass them on to Undergraduate Studies.

The task force on podcasting has continued to meet, but has not made a huge amount of progress. The university decided not to join Apple’s iTunesU due to legal concerns. We anticipate continued experiments this term in lecturecasting (podcast lectures), mostly using handheld digital audio recorders and published using the Blackboard podcasting building block. The podcasting building block we had been using has now morphed into two versions, one commercial and one free. We have upgraded to the free version, named “Oscellot”.

**Upcoming Changes to the System**

We are continuing the trend from last term of less aggressive installation of new Blackboard features than we saw during 2006. Several important behind-the-scenes changes are planned, however.

Our current tentative plans for upgrades are:

<table>
<thead>
<tr>
<th>June 2007</th>
<th>Blackboard Beyond “Scholar” social bookmarking tentative: LDAP authentication via Radius</th>
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</thead>
<tbody>
<tr>
<td>summer 2007 (all day Sat., 18 Aug 2007, and all day Sat, Sep 8, 2007)</td>
<td>“native” LDAP authentication Blackboard 7.2 TurningPoint (clicker) building block implement load balanced front end system</td>
</tr>
<tr>
<td>Winter Break 2007</td>
<td>tentative database server hardware upgrades upgrade database to Oracle 10g</td>
</tr>
<tr>
<td>Spring Break 2008</td>
<td>alternate date for pending major upgrades possible upgrade to Blackboard 7.3</td>
</tr>
<tr>
<td>August 2008</td>
<td>probable date for Blackboard 7.3</td>
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</tbody>
</table>

As noted above, LDAP authentication is a high priority, but is waiting for Information Services. Several additional Blackboard upgrades – notably integration with TurningPoint software for classroom clicker support – depend on LDAP authentication, and so they are also on hold. Moving to LDAP will allow us to retire old and unsupported Radius authentication code in the Blackboard system, and will eventually allow us greater flexibility in who gets Blackboard access. In the short run we do not expect this change to have any user-visible impact, but in the long run it implies that authentication might not necessarily require a computing center email account.

The next major release of Blackboard, 7.2 aka “release 7 application pack 2,” now seems stable enough for us to install. This release makes internal architectural changes, but the externally visible changes are very modest. Among the most visible changes:

- Announcements can automatically generate email to all students in the class
- Additions to the performance dashboard can assist instructors in tracking students and detecting patterns of problems.
- Changes to the discussion board include thread detail, date range search, discussion board grades included by default, and ability of students to subscribe to a thread (and get email notification whenever a new message is posted to that thread)
Blackboard Advisory Committee: Status Report

Blackboard 7.3 is likely to be announced at the Blackboard World conference in July. It is anticipated to be a very major feature release, including a completely rewritten gradebook. As a result, we expect to be conservative in upgrades, probably upgrading during summer 2008.

In addition to the above major upgrades, we anticipate several functionality enhancements. One major change that we expect from Blackboard Inc. is the development of their “Blackboard Beyond” initiative. Basically, this is a set of Blackboard-branded hosted services with links from our Blackboard site. Currently the only such service is a social bookmarking tool, “Blackboard Scholar.” We expect that they will follow up with additional properties (i.e. features), some of which will charge additional fees.

There is quite significant interest on campus in a blog and wiki tool that could be integrated with Blackboard. I am currently exploring 4 possibilities for providing such a tool: (1) documentation on how to link to an externally hosted, e.g. blogger, course blog; (2) provision by Information Services of some standardized blog package hosted on shell.uoregon.edu, with links from Blackboard; (3) possible blogging enhancements as part of a future version of the Blackboard software or as a Blackboard Beyond property; (4) obtaining the money to license the LearningObjects campus pack, which includes blogging capabilities. At this point we have no definite commitment, but my hope is to have a plan in place by summer, with implementation either fall 2007 or winter 2007.

A more minor change to the Blackboard system is an upgrade to the Blackboard podcasting support, via the new “Ocelot” podcasting module.

**Current Policy Issues**

Several issues have come up this term for which input from the Blackboard committee would be particularly valuable.

**Handling DROPs and WITHDRAWs**

One faculty member, Marie Vitulli, asked me to raise with our committee the question of whether we handle DROPs correctly. Our current procedure is to disable student coursesite enrollments when the students either DROP or WITHDRAW. This results in the student disappearing from the blackboard gradebook. In addition at the end of drop/add period we totally delete the student coursesite enrollments for DROPs; this clears up our data, corresponds to the UO’s general perspective that a DROP is like never having participated in the course, and makes it possible for instructors to add the DROPped student back into the class by hand if desired.

Marie’s major problem is that she has team assignments in which one student submits homework done by an ad hoc team of 2. In one case last term student A in the team submitted the assignment then dropped the course. As a result, the data needed to grade the other student in the team was not available. In a second case, Marie reports “another student that wanted to change discussion sections associated with my lecture. She dropped the discussion section, intending to add another section. She was dropped from the lecture and it after the add deadline. She eventually got back in the class by petition but we lost her scores on the first quiz and some HWs.” In this case, we cleaned up and deleted student records at the end of DROP period, and so the gradebook entries for the student were completely deleted at that time. Any discussion board postings by the student would not have been deleted, though.

Is there sufficient dissatisfaction with our current handling of DROPs and WITHDRAWs that we should change the process?
Archiving/deleting old courses

When this committee reviewed the life cycles of courses in 2003 we agreed to a 3 year online retention period for old coursesites. However, the 3 year expiration was not actually implemented until this January, at which time we backed up old coursesites to DVD and deleted all coursesites through the 2002-03 academic year (when we created backups, we “archived” the old sites to DVD, saving not just instructor materials but also student records; in retrospect we might better have “exported” the sites, saving just the instructor-provided materials). Our plan was to follow up by deleting one year of data each September. This change was not as well advertised as it might have been, and caught several faculty by surprise. Many faculty depend on the old sites as a source for materials to reuse in their current course, which they may not teach every year. Tim was contacted by one faculty member for whom he recovered a site from DVD, and several other faculty expressed concern about the process.

At Deb Carver’s request, I reviewed our retention process with Erin O’Meara, the UO electronic records archivist. Erin pointed out that UO policy sets records retention schedules for several types of information stored in a coursesite:

- “course records” (content) are supposed to be retained by the UO for 3 years or until superseded or obsolete. [http://libweb.uoregon.edu/speccoll/records/schedule/166-475-0025.html#6](http://libweb.uoregon.edu/speccoll/records/schedule/166-475-0025.html#6)
- “tests, term papers, and homework” are supposed to be returned to the student, or retained for one term then destroyed as confidential materials. [http://libweb.uoregon.edu/speccoll/records/schedule/166-475-0110.html#9](http://libweb.uoregon.edu/speccoll/records/schedule/166-475-0110.html#9)
- “instructors’ grade records” (your gradebook) are supposed to be retained by the instructor for 2 years. [http://libweb.uoregon.edu/speccoll/records/schedule/166-475-0110.html#20](http://libweb.uoregon.edu/speccoll/records/schedule/166-475-0110.html#20)

Other schedules might also arguably apply. For instance, discussion board postings might qualify as “correspondence,” blackboard calendar entries might qualify as "daily logs."

Given the merger within Blackboard of at least 3 kinds of information with very different retention rules, Erin is comfortable with a 3 year retention interval for the site, but not with long term institutionally maintained DVD archival that includes student work and instructor grade records.

By the way, "course records" are normally the property of the individual instructor and so arguably not university records at all, and that the OAR is a bit simplistic in its treatment of records which depend upon other records, e.g. student discussion board postings that depend upon other postings.

Apropos of records retention, individual instructors can use the “export course” item on the Control Panel to create a ZIP archive containing course materials on their own hard disks. We have not in the past encouraged faculty to do so because the ZIP archives weren’t useful for much except import back into blackboard, but the new bFree tool makes it much more reasonable to see such archives as something a faculty member might want to retain for personal use. If so, that’s up to the individual, but it might reduce the need for centrally maintaining blackboard archives.

We have at least 3 issues to raise with the committee:

1. What is the “record” (official) copy of various materials? The retention policy governs such official records, and only indirectly speaks to unofficial copies. For example, should we consider the blackboard online gradebook when it exists the record copy of the “instructor’s grade records”, or is it just a backup to whatever mechanism the instructor prefers to use (perhaps a hardcopy grade book)?
2. For faculty convenience, what should our coursesite retention policy be? For instance, should we delete coursesites after 3 years, and if so should we retain a backup “export” copy on DVD? Should we delete unused blackboard sites more quickly than 3 years?

3. Whatever we do, how should we notify faculty when we delete old coursesites?

Database Server Upgrades
As we have previously discussed, a major issue shaping the future of the Blackboard system is the need to replace the database server component. The old server, purchased in 2003, is adequate from a performance viewpoint but no longer under warranty. In addition, the architecture of that server, with internal redundancy (multiple CPUs and RAID disks) but no external redundancy, does not offer as high a degree of fault tolerance and rapid disaster recovery as other components of the Blackboard system or the Information Services campus facilities.

Upgrades to the database server have gotten increasing attention on campus. For example, the Emerald ran a story on Mar 2 entitled “Blackboard Site to Receive Makeover.”

In my February status report I noted that we were awaiting proposals for upgrades from Information Services. We finally received a first draft of a proposal. The proposal has rather limited technical detail and a price tag ($300,000 to $500,000) that is about five times what I had originally expected. It has been submitted to the Educational Technology Committee for consideration. I have a possible alternative proposal with an estimated cost of under $100,000, but we have not yet had an opportunity to discuss and assess the various options.

We are actively working on upgrade plans, and may have a revised proposal for the Ed Tech Committee before our Blackboard Committee meeting on May 10. Meanwhile, what comments does the Blackboard Committee have on the upgrade plan?

More open access
As we have previously discussed, many faculty are constrained in their use of Blackboard by our account policies. We have taken several small steps on this front, including:

- Several units on campus are testing alternatives to Blackboard. Moodle is being considered by a few groups as a platform for providing course-like access for non-CRN activities such as continuing education, high school enrichment, and study abroad programs, where the participants are not enrolled UO students. We evaluated Sakai as a possible platform for eportfolios.
- We are now creating a few ad hoc blackboard accounts to deal with special case individuals who need access but who aren’t in the list of authorized users that we obtain from Banner. We do not have a policy framework in place to manage these accounts, and we require that individuals with such accounts also have Computing Center email accounts (soon, entries in the LDAP system instead). As of 4/26 we had 3 such special accounts. An example of such an account is an OSU student enrolled this term in a “joint campus” course that requires UO blackboard access. Another reason for such ad hoc accounts is the case of regular faculty whose UO paperwork is messed up by the department, but who need immediate access in order to prepare a course or administer incompletes. For several months we had accounts created at the request of AHA International, which is owned by the UO but whose employees apparently don’t appear as UO employees; AHA needed to provide access for 15 of its instructors as it evaluated the use of Blackboard in courses it offers overseas.
- We are working with AEI to regularize our processes for AEI course creation, and will review the process for account creation for AEI students.
• We have met with Tim Ketchum and Noreen Hogan of Information Services to review the criteria we use for blackboard accounts. The goal is to somewhat liberalize the criteria and increase the number of UO people who have blackboard access, while making blackboard access more consistent with access to other UO computing resources. I anticipate our providing blackboard access to all UO people in the “Associate” and “Sponsored” categories in the LDAP system, and probably also people in the “Temporary Employee” category.

• As part of the LDAP conversion, Information Services will be issuing LDAP IDs earlier in the process of hiring new employees, and these IDs will we hope be given immediate Blackboard access. This may relieve some problems that have been experienced by adjunct faculty. Also, Information Services will be batch-creating student user IDs more frequently, which should relieve many access problems experienced by late registrants and community ed students.

We had hoped that in addition Information Services would implement a category of “-sponsored accounts.” However, that does not now seem likely this year. Noreen Hogan produced a year ago a policy recommendation that although never approved might be the basis for such sponsored accounts. One significant characteristic of that proposal was that it assumed a process with approvals by the Provost or a delegate, and a fee of $250 per term.

A question for this group is to identify the particular classes of potential users who are currently the most serious problem. Where should we be focusing our short-term attention?

A related question: is there any downside to allowing Blackboard access by associates and temporary employees?