

3. Information Systems Infrastructure and Equipment

Goal 3A. Instructional computer servers and related equipment will be purchased, implemented, and maintained to insure that the university computing infrastructure is capable of supporting the 99 additional distance education courses developed as a part of this project.

Summary

Goal 3A. OSU Computer Infrastructure and Equipment

Systems Implementation. The basic systems supported by this project consists of two Sun Enterprise 450 multiprocessor servers, a 420R and several T3 storage arrays. These servers are currently housed in the machine room of the University Computing Center located in Milne Hall on the OSU campus.

Systems Maintenance. Maintenance activities are an ongoing responsibility of the Information Systems project support staff including two administrators, and additional training staff provided by Extended Campus and Communication Media Center. The amount of activity required for these tasks varies, depending on numerous factors, however the load generally increases during the term breaks. During these times when most classes are not in session activities are oriented toward the system level maintenance procedures that would cause unacceptable downtime during the academic terms.

Product Support. The largest support task by project staff is the OSU Portal (Blackboard), the OSU online course development and management software. All instructors offering distance education courses are required to use Blackboard in support of their distance education course.

Streaming Media. The field of streaming media has continued to evolve during this reporting period. Streaming media shows considerable promise for the instructional arena and it is being incorporated into course development. The OSU Extended Campus is now ready to experiment with delivery via CD and DVD as well as streaming video using Real Media software when video will enhance the educational activity. OSU Extended Campus expects steady growth of traffic and interest in the service. Beginning fall of 2002, the capability of streaming media for courses was developed.

Instructional Portal System. Project staff was instrumental in working together with OSU Central Computing to developing the engineering specifications for the current implementation of the Enterprise-wide Instructional Portal System. This work anticipated the growth of the use of the web for teaching and learning, and administrative and student services. Project staff also developed and implemented emerging technologies in distance education course delivery including the use of databases, streaming media, and the use of course management software packages (e.g., Respondus). These specifications also took into consideration the anticipated growth in the use of the web systems not only by the distance students, but also by resident students, and by other non-

traditional learners (alumni, extension, and OSU's K-12 Online and Workplace non-credit programs).

The learning portal environment was designed for "high availability" with appropriate redundancy. OSU has now implemented the Blackboard 6 Level Three system. The OSU e-mail system is separately housed (with IMAP/POP3 interface). OSU used Oracle 8i for the Blackboard database, and housed on its own separate (Sun) server.

The Portal is now interfacing, event driven, to the OSU SCT Banner system and also connected to Banner for the full Web 4 Student/Faculty/Employee functions, which provides functions such as registering for classes, updating personal information, checking pay information, electronic grade submission, and access to class rosters. OSU has established a LDAP server for single authentication. OSU is also now using the current Banner catalog and schedule of class functions. A level 1 and 2 Help Desk also now supports the system. Level 3 help is managed through the OSU Central Computing service. An online FAQs page for the OSU Portal can be found at: <http://my.oregonstate.edu/>