

EXECUTIVE SUMMARY

ACTION ITEM: WebCT Vista Upgrade

ISSUE: The Board is requested to approve Northern Arizona University's WebCT Vista Upgrade Project for an anticipated cost over five years of \$4.3 million.

BACKGROUND:

- The current WebCT product, called Campus Edition, is an older course management system that does not take advantage of up-to-date hardware, web and database technologies to provide efficient grade book access, strong calendar and assignment integration, rich assessment and collaborative tools, or content management and development tools. The current product is not designed to function as a highly available web product. There are built-in single points of failure that expose NAU to the risk of having a hardware or software problem result in a multi-day outage. NAU's course management system, like its student system, is a mission critical application and should be upgraded to meet the ever-growing demand for web courses.
- Last fall, the Provost Academic Computing Advisory Committee determined that the current course management system was not sufficient to meet NAU needs and embarked on a review process to select a successor. The committee realized that the current situation creates a significant risk for the over 600 web courses that use Campus Edition. Their analysis overwhelmingly favored WebCT's Vista product over two other course management systems. Vista is a significant improvement over the current Campus Edition and is designed to deliver mission critical, highly available web services. It provides state of the art content management, course development, and course management tools. It improves upon every dimension of the campus edition product: better Americans with Disabilities Act (ADA) compliance, better faculty course management tools, better instructional design options, better technical integration and system administration, and a shorter time to train new faculty.

Part of the Vista advantage is the ability to redesign courses to take advantage of a new and enhanced online course environment. Better integration with library materials, better integration with the Oracle/PeopleSoft student system and NAU's portal environment, and better course design involving active learning are all immediately possible. At the same time, future enhancements such as integrations with electronic portfolios, program assessments, and learning objects are also made easier once the upgrade is completed.

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DISCUSSION:

The existing Campus Edition product is being replaced since it is incapable of meeting today's online course expectations. The easier interface and more powerful course management tools will allow faculty to spend less time entering grades or navigating awkward assessment tools and more time helping students and developing new and better course content. More courses will come online faster, larger sections can be easily managed, and courses can be kept up-to-date at a higher quality with this new product. In February 2005, after review and unanimous support by the President's Cabinet, President Haeger approved moving forward with the Vista Upgrade Project.

RECOMMENDATION:

It is recommended that the Board approve NAU's WebCT Vista Upgrade Project at an anticipated cost of \$4.3 million over a five year period.

University IT Project Justification

<i>Institution</i>	<i>Project Sponsor Name and Phone</i>
NAU	Liz Grobsmith, 928-523-2230 Fred Estrella, 928-523-9998
<i>College or Unit</i>	<i>Date Submitted</i>
Provost/Academic Affairs & ITS	March 10, 2005

Project

Upgrade the WebCT course management system in use at NAU from Campus Edition to Vista.

Project Overview

Introduction: The Provost Academic Computing Advisory Committee has determined that the current course management system, WebCT Campus Edition, is not sufficient to meet NAU's needs. The vendor has a newer and more robust product named Vista that will provide better functionality, will scale to larger numbers of courses, and will be more reliable with less potential for unscheduled outages. The Vista product fits in well with other online systems and strategies and will greatly improve our ability to host online courses in the future. Online courses at NAU are on the rise and replacing this system now is a crucial strategic decision supported by the administration and faculty at NAU.

Problems with current product:

Functionality: The current product is an older course management system that does not take advantage of up-to-date web and database technologies to provide efficient grade book access, strong calendar and assignment integration, rich assessment and collaborative tools, or content management and development tools. The current product, in short, is years behind modern course management systems.

Design: The current product is not designed properly to function as a highly available web product. There are built-in single points of failure that expose NAU to the risk of having a hardware or software problem result in a multi-day outage. NAU has determined that our course management system, like our student system, is a mission critical application. The current product is, again, years behind in terms of being designed properly for a mission critical service.

Advantages of VISTA

Vista is a significant improvement over the current Campus Edition. It is designed to deliver mission critical, highly available web services. It provides state of the art content management, course development, and course management tools. It improves upon every dimension of the campus edition product: better ADA compliance, better faculty course management tools, better instructional design options, better technical integration and system administration, and a shorter time to train new faculty.

Part of the Vista advantage is the ability to redesign courses to take advantage of a new and enhanced online course environment. Better integration with library materials, better integration with the Oracle/PeopleSoft student system and NAU's portal environment, and better course design involving active learning are all immediately possible with this upgrade. At the same time, future enhancements such as integrations with electronic portfolios, program assessments, and Learning Objects are also made easier once the upgrade is finished.

Scope of work: Currently there are approximately 600 courses using the current WebCT campus edition software. Some 7,000 students and 150 faculty are actively using the system. At the same time, every student is enrolled in a non-credit WebCT IT training course as part of the services and online environment we offer to students.

This upgrade involves acquiring new, load-balanced servers; converting and redesigning existing courses; building interfaces to the student system (Oracle/PeopleSoft); establishing new course templates and automatic procedures for building courses; training faculty, library, course designers, and support staff in the new system; and defining a campus administrative structure using the role and content management features of this highly configurable product.

Staffing: The upgrade requires keeping the old system running for a period of two to three years while bringing up a more complex and better engineered new system. The project plan includes additional staff in Information Technology Services and in the Center for Technology Enhanced Learning.

Funding: Financial support for this project will come from State and local funding.

Deliverables

This project will deliver a modern web-based course management environment with all existing courses converted to using the new Vista product. The resulting course management system will interface with NAU's Oracle/PeopleSoft system, LDAP, MyNAU portal, and CAS single sign-on environments.

Implementation Phase

Installation: Multiple Vista host environments need to be sized, purchased, and then installed: production, test, and development.

Administrative Configuration Design: Decisions need to be made regarding how to set up courses (using a department hierarchy versus using a flat section model, etc.) and how to assign roles such as graduate assistants, instructional designers, instructors, and system administrators.

Integrations: Integrations with the existing Oracle/PeopleSoft student system, the campus LDAP directory service, the NAU Portal, and the single sign-on CAS system are required.

Course Conversion: All existing courses will need to be converted to the new system if possible. Some archival courses using third party course packs may need to stay on the old system for a period of four years.

Training: There are at least two major groups for training. Initial training will involve system administrators and instructional designers. A “train the trainer” approach will be pursued to build local expertise in Center for Technology Enhanced Learning (CTEL), with the Help Desk, and with selected faculty champions and mentors.

Professional Services and Staffing: Additional staffing and professional services are built into the budget for this phase to assure the work can be finished by May 2006.

Sustainability Phase

Ongoing Maintenance: After the installation, conversion, and initial training, the project enters an ongoing maintenance, training, and course development phase.

New Opportunities: Exciting new opportunities will open up due to this upgrade. Staffing and resources sufficient to pursue the most lucrative, such as integration with open source e-portfolios, will be retained for the sustainability phase.

Staffing: Additional staff beyond the implementation phase, based on the additional complexity and increased use of the new course management system, is projected in the budget for this project.

Service and Economic Benefits

The existing product is being replaced as it is recognized as incapable of meeting today’s online course expectations. The easier to use interface, and the more powerful course management tools, will allow faculty to spend less time entering grades or navigating awkward assessment tools and more time helping students and developing new and better course content. Ultimately, more courses will come online faster, larger sections can be managed, and courses can be kept up to date at a higher quality with this new product.

Project Roles and Responsibilities

Sponsors: The Provost and the Chief Information Technology Officer are responsible for securing the appropriate NAU funding and prioritizing campus resources for this project. The Chief Information Technology Officer is responsible for the assurance that the project integrates into the campus information technology architecture based on the Tri-University Information Technology Architecture and that the project plan is sufficient in scope and detail to assure project success.

University project manager: NAU will assign the ITS Director for Academic Computing as the project manager to control and coordinate the project.

Project Management Timeline

Dec 2004-Feb 2005 – Project Planning, Analysis
 Mar 2005-Apr 2005 – Equipment Acquisition, Administrative configuration, Training, Course Conversion, Integrations
 Apr 2005-Aug 2005 –Course Conversion/Upgrades, Training, Testing, Integrations
 Aug 2005-Dec 2005 – First Semester Pilot use of Vista
 Dec 2005-May 2006 – Second Semester cutover to Vista (end of Phase 1)
 Jun 2006-May 2009 – Sustainability Phase

**Summary of Proposed Costs
 (All Funds)**

Five Year Total (\$000)						
Description	FY05	FY06	FY07	FY08	FY09	Total
Implementation Cost	\$519	\$77	\$0	\$0	\$0	\$596
Operating Cost	\$385	\$767	\$792	\$843	\$894	\$3,681
Total Cost	\$904	\$844	\$792	\$843	\$894	\$4,277

Opportunities for Collaboration

No tri-university collaboration is recommended initially as this project will require significant in-house resources and focus to complete on time and on budget. However, Vista can be configured to run in a multi-institutional mode. Future 2+2 relationships with community colleges or future use for Arizona Regents’ University courses is a possibility once the implementation phase is complete.

Recommendation

ABOR approve the WebCT upgrade to Vista for NAU.

Implementation Costs and Marginal Operating Costs in Thousands

<i>Costs in thousands (\$000)</i>						
Development/ Operating						
<i>Description</i>	<i>FY05</i>	<i>FY06</i>	<i>FY07</i>	<i>FY08</i>	<i>FY09</i>	<i>Total</i>
Personnel						
Number of IT FTE	1.80	1.80	1.80	1.80	1.80	9.00
Number of CTEL FTE	4.24	5.62	5.62	3.75	3.75	22.98
Number of Other FTE	0.50	1.00	1.00	1.00	1.00	4.50
Personnel Cost						
IT FTE Salary Cost (includes ERE)	\$165,045	\$213,289	\$209,273	\$215,551	\$222,018	\$1,025,176
CTEL FTE Salary Cost (includes ERE)	\$185,199	\$312,077	\$321,439	\$296,989	\$305,899	\$1,421,604
Other FTE Salary Cost (includes ERE)	\$35,000	\$55,000	\$56,500	\$53,045	\$54,636	\$254,181
IT Services Cost (Professional and Outside Consultants)	\$134,120	\$31,620	\$0	\$0	\$0	\$165,740
Hardware Cost	\$183,448	\$15,438	\$15,837	\$69,846	\$83,419	\$367,988
Software Cost						\$0
Communications Cost						\$0
Facilities Cost						\$0
Licensing and Maintenance Fees ¹	\$138,336	\$171,600	\$188,760	\$207,636	\$228,400	\$934,732
Other Costs Training & Travel	\$63,000	\$45,000	\$0	\$0	\$0	\$108,000
TOTAL	\$904,148	\$844,024	\$791,809	\$843,067	\$894,371	\$4,277,420

Notes:

¹ These figures include \$58,450 per year in the existing ITS budget for current WebCT Campus Edition license and maintenance fees.