

# University of Wisconsin Green Bay

## IT 2005 Action Plan

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Approved by  
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### Contents

- I. Prelude to the IT 2005 Action Plan, page 2
- II. Overview of the IT 2005 Action Plan, page 3
- III. Planning Objectives, page 4
- IV. Implementation Strategies, page 5
- V. Time Tables, page 12
- VI. Web Accessibility Initiative, page 13

## **I. Prelude to the 2005 Action Plan**

The “IT 2005 Action Plan” is the second-generation technology plan developed by the UW Green Bay Information Services Division. The first action plan, “IT 2000,” was developed in consultation with the Technology Council and adopted by the Chancellor’s Planning and Resource Council in June 1998. The plan outlined activities for the period 1998 through 2000 focusing on four strategic directions:

- Replacing and reconfiguring the campus network system
- Replacing the library management system
- Upgrading the database management system for student information
- Automating business critical functions

The replacement and reconfiguration of the campus network system was the foundation of the campus technology plan and supported all of the other information technology objectives. Between the summer of 1998 and the fall of 1999 the IS Division accomplished the following:

- Replaced the Cabletron network with a state-of-the-art-switched Ethernet backbone, and continued replacing category 3 data cable with category 5
- Replaced the DEC Open VMS Pathworks network operating system with Microsoft NT
- Replaced or upgraded all Macintoshes and PCs (1,200 workstations)
- Replaced Windows 3.11 with Windows NT client, and installed Microsoft Office 97
- Provided end-user training for all faculty, staff and students
- Installed a new web server with a search engine and implemented a new web design.

The replacement of the library management system was accomplished during the latter half of 1999 with the new Voyager library system in full production by January 10, 2000. The KeyNOTIS library management system was officially decommissioned in April 2000.

In 1998 WebCT was adopted as the campus standard for developing web courses and web-enhanced courses. The Learning Technology Center provided on campus training and support for WebCT. During 1999 and 2000 the Extended Degree program offered a dozen asynchronous web courses using the production WebCT utility at the UW Madison Division of Information Technology.

The upgrade of the student information system will be accomplished as part of the migration from the SOAP, STAR, and SIRS systems to the PeopleSoft Student Information System. This project is addressed in the 2005 Action Plan.

The automation of campus business functions has been driven by UW System and State of Wisconsin initiatives and is well underway. The major initiative is the migration to PeopleSoft Shared Financials Systems, which includes: general ledger, purchasing, accounts payable, accounts receivable and fixed assets. The Business and Finance Office lead the implementation on the Green Bay campus. On July 1, 2000 UW Green Bay went live with the general ledger,

purchasing and accounts payable modules. The other modules of the Shared Financial Systems will be in production by December 2001. The impact of this implementation is discussed more fully in the 2005 Action Plan.

Another computer application from UW system is the Kronos time-keeping system. This system was to be implemented for student payroll in January 1999, but the software development lagged and the product was not released until March 2000. The Student Union began beta-testing the product in the spring of 2000. Implementation of this system will be incorporated into the IT 2005 Action Plan.

Another automated system identified in the "IT 2000 Action Plan" was the Shared Human Resources System (SHRS) developed by the Wisconsin Department of Employee Relations. This system was released to end-users in October 1999 and is used for classified staff recruitment.

In summary, of the thirteen objectives established in the IT 2000 Plan, nine were completed by mid 2000 and four were well underway. The unfulfilled objectives have been incorporated in the "IT 2005 Action Plan," which establishes technology directions in support of the mission and goals of the University for 2000-2005.

## **II. Overview of the 2005 Action Plan**

The IT 2005 Action Plan identifies objectives and strategies for using technology to enhance student learning, support the preservation, creation and transmission of knowledge and support campus management functions.

The IT 2005 Action Plan includes a dozen objectives that fall into three main groups:

- Support ongoing applications
- Implement business critical applications
- Develop planning documents for future applications

The IT 2005 Action Plan is organized by these main groups with objectives and strategies identified for each of the groups. A tentative timeline is included at the end of the plan.

It is important to note that the top two priorities for 2000-2002 are implementation of the Shared Financials System and the Student Information System.

### **III. Planning Objectives IT 2005 Action Plan**

#### **Support ongoing initiatives**

Planning Objective 1: Support the use of technology in teaching.

Planning Objective 2: Keep current on server and desktop hardware, operating systems and applications.

#### **Implement business critical applications**

Planning Objective 3: Implement PeopleSoft Shared Financial Systems (SFS)

Planning Objective 4: Implement PeopleSoft Student Information System (SIS)

Planning Objective 5: Implement Kronos timekeeper system.

Planning Objective 6: Implement classroom-scheduling software.

Planning Objective 7: Implement additional Voyager modules

Planning Objective 8: Implement human resources system.

#### **Develop planning documents for future applications.**

Planning Objective 9: Develop a distance education plan.

Planning Objective 10: Develop a telecommunications and networking plan.

Planning Objective 11: Develop a web services plan.

Planning Objective 12: Develop an imaging/document storage plan.

## **IV. Implementation Strategies for IT 2005 Action Plan**

### **Support Ongoing Initiatives**

#### **IT 2005 Planning Objective 1: Support the use of technology in teaching.**

Explanation. One of the goals of the campus technology plan is to equip classrooms, lecture halls and other learning spaces with appropriate technologies to allow all faculty reliable access to the instructional technology resources and applications they need to complement instruction and enhance the overall teaching-learning process.

Strategy 1.1 Continue to work with the Madison WebCT utility, and offer faculty/staff training seminars on WebCT through the Learning Technology Center.

Strategy 1.2 Provide formal orientation and technical support for new faculty, including, presentation software, document storage and retrieval, web page development, curriculum software, electronic library resources, digital audio and video production, and WebCT.

Strategy 1.3 Explore other curriculum technology and provide advice to Academic Affairs regarding implementation.

Strategy 1.4 Continue to support specialized software in general access labs and academic labs.

Strategy 1.5 Develop a three-year plan for the replacement of classroom technology.

Strategy 1.6 Assist with technology planning for the new academic building (Mary Anne Cofrin Hall) especially the design and implementation of a new distance education facility.

Strategy 1.7 Develop a plan for the ongoing maintenance of hardware and software in the student specialty labs.

Strategy 1.8 Evaluate current technology in regards to accessibility for students with disabilities.

## **IT 2005 Planning Objective 2: Keep current on server and desktop hardware, operating systems and applications.**

Explanation. In 1998 the campus adopted Microsoft NT for the PC desktop operating system, Microsoft Office Suite for office applications, and Microsoft Outlook/Exchange for email and calendaring groupware. These will remain campus standards for three to five years for several reasons. The campus has passed the learning curve on the new software and most people now report an increase in productivity with Microsoft tools. The UW System has recently negotiated a favorable three-year Microsoft contract with a one-year extension. Many faculty, staff and students have taken advantage of the home use rights license and appreciate having their office and home software in common. In order to stay current the campus must continue to upgrade its software on a regular basis. The best window of opportunity for upgrading software is during the summer as this is least disruptive for the academic programs. The upgrade to Office 2000 in the summer of 2000 was a relatively minor upgrade. The upgrade to Windows 2000 will be a major upgrade requiring a significant development effort on the servers and desktops, and the recloning of all computer workstations.

Strategy 2.1 Upgrade from Office '97 to Office 2000 for PCs in summer 2000.

Strategy 2.3 Plan for upgrade to Windows 2000.

Strategy 2.3 Upgrade campus workstations and servers to Windows 2000 in summer 2001.

Strategy 2.4 Continue to support Macintosh users.

Strategy 2.5 Continue to work toward a desktop replacement fund for supporting the technology replacement cycle.

Strategy 2.6 Plan for server upgrades and replacement.

Strategy 2.7 Continue to provide technical training for IT staff.

Strategy 2.8 Continue to provide application training for end-users.

Strategy 2.9 Continue to provide help desk support and maintain call tracking, inventory and knowledge base software.

## **Implement Business Critical Applications**

### **IT 2005 Planning Objective 3: Implement PeopleSoft Shared Financial Systems (SFS)**

Explanation. PeopleSoft SFS includes modules for General Ledger, Purchasing, Accounts Payable, Accounts Receivable, Billing and Assets Manager. The architecture design is a centralized database residing on large servers in Madison, with the PeopleSoft client software residing on campus workstations. This enterprise reporting and management system represents a new way of doing business for the campus. Most of the current business practices will be changed, and most paper forms and reports that currently exist will disappear and be replaced by online data input and lookup. For example, paper requisitions will no longer be used. Instead, program assistants will key-in their purchase orders directly. Financial Specialists will no longer receive printed ledgers; rather, they will look up payments online. The end-user training effort is nearly as daunting as the changeover from Windows 3.11 to Windows NT. In order to prepare staff for using the new financial system, PeopleSoft trainers will be brought to campus for the high end users, and Information Services trainers will assist with training Program Assistants who use limited functions. During the first six to nine months of production the campus should expect a reduction in productivity for some business functions in the Business and Finance Office, Purchasing, the Bursar, and Financial Specialist activities. Once the system is fully deployed and people have crossed the learning curve, efficiency should improve. The first three modules (General Ledger, Purchasing, and Accounts Payable) went into production on July 1, 2000. Assets Management and Billing will go into production in July 2001 and Accounts Receivable in January 2002.

Strategy 3.1 Install client software.

Strategy 3.2 Train primary functional users.

Strategy 3.3 Train all end users.

Strategy 3.4 Provide help desk support for users.

### **IT 2005 Planning Objective 4: Implement PeopleSoft Student Information System (SIS)**

Explanation. The Peoplesoft SIS has been selected as the next-generation student information system to replace the in-house developed SOAP, STAR, and SIRS systems. The campus will continue to use the legacy system until the new PeopleSoft system can be fully implemented. The implementation process began in January 2000 and will take two years to implement all modules. This is a major undertaking and will eventually affect all staff, faculty and students. A separate planning document outlining project goals, organizational structure and timelines has been developed to guide the project. Listed below are the main strategies.

Strategy 4.1 Appoint an Administrative Systems Project Manager to coordinate all aspects of the project.

Strategy 4.2 Create functional, technical, policy and oversight teams to carry out the implementation.

Strategy 4.3 Provide training for functional, technical and end-user staff.

Strategy 4.4 Develop timeline for implementation.

Strategy 4.5 Secure consulting services where needed to maintain project timeline.

Strategy 4.6 Convert other systems not provided by PeopleSoft modules.

Strategy 4.7 Develop reports.

Strategy 4.8 Work with MILER excellence team and UW Collaterals group to reduce cost and increase efficiency of the implementation.

#### **IT 2005 Planning Objective 5: Implement Kronos time-keeper system.**

Explanation. The UW Processing Center (UWPC) is changing its student payroll system to a web environment and has selected the Kronos Time Keeper software for the campuses to record employee work time. Originally, UWPC expected to use the time keeper system for all faculty, staff and student employees, but the Kronos implementation has been restricted to student employee time-keeping.

Strategy 5.1 Beta-test Kronos product in Union.

Strategy 5.2 Implement Kronos product in Information Services.

Strategy 5.3 Provide training for offices and implement Kronos product on remainder of campus by fall 2001.

#### **IT 2005 Planning Objective 6: Implement Classroom Scheduling software.**

Explanation. This software application will allow the Registrar to automate the process of classroom assignment. The software will enable the Registrar to establish criteria for classroom assignment which takes into account special teaching requirements, such as the need for certain technology or lab facilities. This will match the needs of the faculty with classroom characteristics.

Strategy 6.1 CIT staff installs and tests software.

Strategy 6.2 Registrar staff create database of classroom characteristics.

Strategy 6.3 Software in production for scheduling fall 2000 classes.

### **IT 2005 Planning Objective 7: Implement additional Voyager modules.**

Explanation. Now that the basic modules of the Voyager system are in production the library automation staff can turn their attention to several new areas of functionality: Universal Borrower, Media Booking, and the upgrade of the Acquisitions module. In addition, the campus will participate in the development of a common search interface for the UW System catalog.

Strategy 7.1 Implement Voyager “universal borrower” and participate in UW planning for “universal catalog or common interface” for fall 2001

Strategy 7.2 Implement Voyager media booking module in spring 2001

Strategy 7.3 Upgrade Acquisitions module as part of Voyager 2000 upgrade in July 2001

Strategy 7.4 Implement end-user-training program and point-of-use aids for Voyager library system for spring 2000

Strategy 7.5 Develop customized staff reports as required.

### **IT 2005 Planning Objective 8: Implement human resources/payroll system.**

Explanation. In the spring of 1999 Vice President Marcia Bromberg appointed a task force to develop specifications for a new Human Resources system that would include appointments, payroll and benefits modules. This new system will replace the legacy system in use by the UW Processing Center (UWPC) A Request for Proposal (RFP) was issued late in 1999 and responses were due in February 2000. The RFP responses were evaluated during the spring 2000 and the Lawson System was selected. The new system will be implemented over several years beginning in 2001 similar to the central server model and phased approach used in implementing the Shared Financials System.

## **Planning For Future Applications**

### **IT 2005 Planning Objective 9: Develop a distance education plan.**

Explanation. The campus has used a variety of technologies to import and export courses: audio-graphics, compressed video, the Internet, and more recently the Web. The Nursing and Extended Degree programs are the heaviest users of distance education technology. Several faculty have offered Internet courses in various programs across campus. There is no plan that identifies the strategic direction for distance education, thus it is difficult to respond to the technology and student support issues. The UW system is developing a policy document for distance education pricing methodologies and service standards. UW-Green Bay should have a plan that identifies curricular directions, pedagogical goals, and technology platforms for receiving and delivering educational programs using technology over the next five years. This plan should incorporate the use of assistive technology to ensure accessibility for students with disabilities.

Strategy 9.1 Appoint a task force that includes all constituents who would develop or support distance education courses/programs with the charge of developing a DE plan.

Strategy 9.2 Appropriate policy and/or governance groups will review the plan.

### **IT 2005 Planning Objective 10: Develop a telecommunications and networking plan.**

Explanation. The campus needs an overall plan for telecommunications services that will direct technology acquisitions over the next five years, and a migration plan from the current 3Com hardware to the next generation core switch. The plan will inventory current technology and services, identify current unmet needs, and outline future directions for the campus. This plan should incorporate the use of assistive technology to ensure accessibility for students with disabilities.

Strategy 10.1 Conduct an inventory of telephone lines and services.

Strategy 10.2 Gather information from users regarding telephone and telecommunications needs.

Strategy 10.3 Review alternatives for replacing campus network core switch.

Strategy 10.4 Plan for future network development, including Gigabit, video over IP, telephony, and wireless technologies.

## **IT 2005 Planning Objective 11: Develop a web services plan.**

Explanation. The campus web continues to grow in content and importance. The last major report on the development of the campus web was done in January 1997. While the policies have served well over the past three years, the organizational structure and design have been changed to accommodate the continued growth and complexity of the web. There are new demands for services and assistance with web development. Some of our auxiliaries are interested in using the web for retailing, and within the next two years students should be able to pay their fees and tuition online. Even today the policies are in need of review as several areas are interested in exploring portals and advertising. The campus needs a web services plan to advance to the next level of Web applications. This plan should incorporate the use of assistive technology to ensure accessibility for students with disabilities.

Strategy 11.1 Create a Web user group and seek advice on organizational structure, design, navigation and services, electronic commerce, and institutional image management.

Strategy 11.2. Employ a consultant to provide advice on e-education and e-business applications.

Strategy 11.3. Pursue the development of a UW-Green Bay intranet and extranet as separate from the public Internet.

Strategy 11.3 Develop webmaster position(s) to maintain the institution level and client side of the web, including web software, organization and navigation, design changes, and development of web transactions, as well as content management.

Strategy 11.4 Investigate tools and procedures for end-user data mining from server generated access logs.

Strategy 11.5 Develop a policy document for web accessibility which establishes design standards for web pages to ensure equal access for all users, including those with disabilities.

## **IT 2005 Planning Objective 12: Developing an Imaging/Document storage plan.**

Explanation. In 1998 a Task Force studied the problem of records management across the campus. The Task Force concluded that the current system of paper and microfilm is inefficient. They recommended that the campus work toward a system of electronic records management that would allow multiple offices to access documents, such as student records, and to store the records using an imaging system. This recommendation was incorporated into the campus technology plan in 1998, but has been put on the back burner due to other more pressing and

costly undertakings. The objective in the 2005 Action Plan will be to reexamine this issue in light of the new PeopleSoft student information system and develop a plan that will move toward the goal of more efficient information storage and retrieval for campus records.

Strategy 12.1 Conduct an inventory of document imaging needs.

Strategy 11.2 Review State and Federal requirements.

Strategy 11.3 Employ a consultant to provide advice on hardware, software and database management for a document imaging system.

Strategy 11.4 Develop a technical plan and cost/benefit analysis for the document imaging system.

## Time Table

Planning Objective	Start Date	Production Date	Completion Date
1: Support Technology in Teaching	2000		2005
2: Desktop applications and operating systems	April 2000	June 2000	August 2001
3: Shared Financials System	August 1999	July 2000	Jan. 2002
4: Student Information System	October 1999	Sept 2001	June 2002
5: Kronos Time-Keeper	January 2000		2002
6: Classroom Scheduling	October 1999	April 2000	Fall 2000
7: Voyager Library System	August 1999	Jan. 2000	Fall 2001
8: UW Appointments, payroll & benefits system	2002	2003	2004
9: Distance Education Plan	2001	2002	2003
10: Telecommunications Plan	2000	2001	2002
11: Web Services Plan	2000	2002	2004
12: Imaging/document storage plan	2001	2003	2005

# University of Wisconsin-Green Bay Web Accessibility Initiative (WAI)

Approved: UW-Green Bay Technology Council (5/12/01)  
UW-Green Bay Leadership Team (6/6/01)

## Purpose

The University of Wisconsin-Green Bay provides access to a wide range of web-based information and services including admissions, registration, student support services, course content and discussion groups, library services, and many business services. With the proliferation of web pages comes the responsibility to ensure that these resources are available to all users, including those with disabilities. The purpose of this document is to identify policy and design requirements for campus web developers to provide alternative means of communication/dissemination for persons with visual impairments, hearing impairments, and other disabilities. The Learning Technology Center will provide assistance to web developers in the form of style guides, orientation for designing accessible web pages, and assessment of web pages relative to the campus accessibility policies and standards.

## Policy

The University of Wisconsin-Green Bay is committed to providing equal access to its web sites and web-based information for all users. This includes persons with disabilities accessing the web through disability software/hardware.

All web pages (new, existing, or in development) hosted on the UW-Green Bay campus web server (WEBA) or which represent UW-Green Bay, must be in compliance with this policy by August 1, 2002.

UW-Green Bay endorses the **World Wide Web Consortium (www.w3c.org)** guidelines as the standard for Web accessibility in compliance with Section 504 of the Rehabilitation Act of 1973 (PL 93-112 Sec. 504, 29 USC 794), the Assistive Technology Act of 1998 (PL 105-394, 29 USC 3001), and the Americans with Disabilities Act (PL 101-336, 42 USC 1201).

All UW-Green Bay Web pages must meet the following standards:

- 1) All **Priority 1** checkpoints must be satisfied (*by August 1, 2002*)
- 2) All **Priority 2** checkpoints should be satisfied (*strongly recommended*)
- 3) All **Priority 3** checkpoints may be satisfied (*desirable- but optional*)

Each University Unit is responsible for coordinating and achieving compliance with this policy for both the unit-wide pages and those pages created by or for individuals in the

unit. The UW-Green Bay Campus Webmaster may grant exceptions to this policy when compliance is not possible or requires extraordinary measures.

University entities developing Web pages for a federal agency should comply with the University's Web accessibility policy standards or the federal agency standards, whichever is the higher standard.

It is recommended that a variety of Web browsing software (primarily Netscape and Internet Explorer), different operating systems (Mac OS and Windows), and evaluation tools be used to test access to Web pages.

## Priority 1 Checkpoints *(must be satisfied)*

1. Provide a text equivalent (ALT-tag) for every non-text element. This includes: images, graphical representations of text (including symbols), image map regions, animations (e.g., animated GIFs), applets and programmatic objects, frames, scripts, images used as list bullets, spacers, graphical buttons, audio and video.
2. Ensure that all information conveyed with color is also available without color, for example from context or markup.
3. Ensure that foreground and background color combinations provide sufficient contrast when viewed by someone having color deficits or when viewed on a black and white screen.
4. Organize documents so they may be read without style sheets.
5. Until user agents allow users to control flickering, avoid causing the screen to flicker.
6. Use the clearest and simplest language appropriate for a site's content.
7. Client-side image maps are preferred. If server-side image maps are used redundant text links for each active region of a server-side image map must be provided.
8. For data tables, identify row and column headers.
9. For data tables that have two or more logical levels of row or column headers, use markup to associate data cells and header cells.
10. Title each frame to facilitate frame identification and navigation.
11. Ensure that pages are usable when client-side scripts, applets, or other programmatic objects are turned off or not supported. If this is not possible, provide equivalent information on an alternative accessible page.
12. Ensure that equivalents for dynamic content are updated when the dynamic content changes (e.g., applets, scripts, etc).
13. Until user agents can automatically read aloud text equivalent of a visual track, provide auditory description of the important information of the visual track of a multimedia presentation or provide a text equivalent of the information contained in the presentation.
14. If, after best efforts, you cannot create an accessible page, provide a link to an alternative page that uses W3C technologies, is accessible, has equivalent information (or functionality), and is updated as often as the inaccessible (original) page.

## Priority 2 Checkpoints *(should be satisfied)*

1. When an appropriate markup language exists, use markup rather than images to convey information (use text links instead of a graphic with words for links).
2. Use relative rather than absolute units in markup language attribute values and style sheet property values (the page and its elements will size appropriately to the user's screen).
3. Use headers, lists and list items properly to convey document structure and use them according to specification.
4. Use style sheets to control format and presentation of text.
5. Until user agents allow users to control blinking, avoid causing content to blink (i.e., change presentation at a regular rate, such as turning on and off). This does not refer to animated GIF's (though care should be exercised when using these).
6. Until user agents provide the ability to stop the refresh, do not create periodically auto-refreshing pages.
7. Until user agents allow users to turn off spawned windows, do not cause pop-ups or other windows to appear and do not change the current window without informing the user.
8. Divide large blocks of information into more manageable groups where natural and appropriate.
9. Clearly identify the target of each link.
10. Provide information about the general layout of a site (e.g., a site map or table of contents).
11. Use navigation mechanisms in a consistent manner.
12. Do not use tables for layout unless the table is readable when linearized.
13. If a table is used for layout, do not use any structural markup for the purpose of visual formatting.
14. Describe the purpose of frames and how frames relate to each other if it is not obvious by frame titles alone.
15. For scripts and applets, ensure that event handlers are input device-independent.
16. Until software allows users to freeze moving content, avoid movement in pages (The BLINK and MARQUEE elements should not be used).
17. Make programmatic elements such as scripts and applets directly accessible or compatible with assistive technologies.
18. Ensure that any element that has its own interface can be operated in a device-independent manner.
19. Create a style of presentation that is consistent across pages.
20. Until user agents support explicit associations between labels and form controls, for all form controls with implicitly associated labels, ensure that the label is properly positioned.
21. Associate labels explicitly with their controls (identifies by words, that a form element should be completed by the user – e.g., “Enter full name” instead of “full name”).

## Priority 3 Checkpoints *(may be satisfied)*

1. Create a logical tab order through links, form controls, and objects.
2. Provide navigation bars to highlight and give access to the navigation mechanism.
3. Place distinguishing information at the beginning of headings, paragraphs, lists, etc.
4. Supplement text with graphic or auditory presentations where they will facilitate comprehension of the page.

## Resources

- **W3C Web Accessibility Initiative ([www.w3c.org/wai](http://www.w3c.org/wai))** Developed to increase Web accessibility for people with disabilities.
- **Learning Technology Center ([www.uwgb.edu/learntech](http://www.uwgb.edu/learntech))** Many excellent resources to assist you, located on UW-Green Bay's campus.
- **Bobby ([www.cast.org/bobby](http://www.cast.org/bobby))** Developed by CAST, Bobby helps authors determine if their sites are accessible.

**AnyBrowser ([www.anybrowser.com](http://www.anybrowser.com))** View your site in various screen sizes, with images replaced by ALT text, HTML and link validation, search engine tools, and other browser compatibility tests.