

Standards for Development of Business Processing & Information Systems

Version 1.3 11/27/07

Pacific remains committed to the comprehensive Banner system to continue to gain cost efficiencies, free new features, and improved processing opportunities. When departments require new or improved information systems, the Banner system is *generally* going to be the best choice: lowest cost, most efficient, easiest to implement and maintain.

Therefore, OIT must be called upon to assist with a Banner applicability assessment when new application needs or requirements are identified. The Banner system should always be ruled out before considering other vendors or software to accomplish Pacific's business goals. After an analysis of Banner is completed, if Banner is ruled out, the next step should be to look for services or software from vendors that partner with the Banner system vendor, SungardHE. To initiate the Banner applicability assessment, an OIT project submission form must be completed. This online submission form can be accessed at http://www.pacific.edu/OIT/ea/project_submission/default.asp.

In any event, a decision to use a product other than Banner should be based on actual requirements (as opposed to convenience or lack of familiarity), cost effectiveness, staffing requirements, the product's ability to fully integrate with the Banner system for data synchronization, with insidePacific for access, and the product's data integrity and security capabilities. Care must be taken as all integration costs are the responsibility of the application sponsor. Integration is not a one-time event, but rather an on-going expense.

The following standards must be met to integrate any new system with the University's Banner system:

- 1) all associated servers, appliances and data storage devices must be co-located in the OIT Data Center according to the current OIT co-location rules. (Amongst other requirements, co-location requires that applications must be hosted on SUN or Dell servers and that data reside on the OIT filers, not the co-located system.)
- 2) all databases and associated software integral to the application must utilize Oracle products leveraging the Pacific Oracle Campus-Wide License
- 3) applications utilizing an online payment process must coordinate with Business and Finance/Treasury systems and integrate with Touchnet U-Pay or MarketPlace modules to comply with payment industry standards.
- 4) applications must securely integrate with Active Directory, with Luminis, and allow single sign on
- 5) applications must provide real-time, bi-directional data synchronization with Banner. Otherwise, applications must provide, OIT approved, full two-way encrypted data exchange feeds.
- 6) applications must have a dedicated, experienced, technical application administrator. If that person is to report to OIT, then the unit must have a functional analyst dedicated to the application. In any event, OIT may also need to increase staff to accommodate application integration.
- 7) applications support requests must come into the HEAT system and be assigned to the application administrator.
- 8) the applications administrator must be available 24x7 by cell or PDA for problem notification
- 9) all components of the system and the installation must meet minimum security standards, pass a vulnerability analysis scan, and have completed a security business impact and criticality assessment.
- 10) any related contracts should include: ongoing maintenance, support, upgrade and replacement provisions (3 year life cycle for hardware) for the system
- 11) all contracts should be reviewed to ensure that they do not fall under any existing licensing/maintenance agreements of the University
- 12) all information and technology contracts must be reviewed by OIT and approved by the CIO prior to execution (signing)

- 13)unit must submit to OIT, and/or agree to, a viable business continuity plan and/or provision for high/continuous availability prior to installation
- 14)units must show they have funding secured for all of the above for a 3-year life cycle

These Standards may be revised from time to time. Please contact OIT Enterprise Applications to ensure you have the latest version.

Background

Over a decade ago, the University made the strategic decision to integrate Pacific's business processing and enrollment services functionality in an authoritative enterprise resource planning (ERP) system that today consists of Banner, Self-Service, Luminis and LDI (referred to as simply "Banner" going forward). ERP systems bring substantial benefit to organizations. For example:

- ERP systems capture data once, at the source: an entity's data is compiled in *one* record with many branches according to its activities in, and interactions with the organization
- ERP systems allow the appropriate data access across the lines of business needing to use the same record, reducing conflicting information about the same entity across different systems
- a single data record per entity allows service providers to view, evaluate and understand an entity holistically
- entities can be provided services and advised based on their full history vs. a limited view of it
- cross-business or cross-service transacting is significantly more efficient, increasing internal and external accountability
- as technology evolves, ERP system vendors build new features into the products that customers gain for free in upgrades
- ERP vendors integrate all parts of their systems out-of-the-box (e.g. Banner, Self-Service, Luminis and LDI)
- the *entire* organization gains improved communications, security, data processing and service delivery tools as ERP products evolve
- the longer a viable ERP system is in production, the greater the benefit gained from the evolving depth and breadth of institutional facility with it

The Banner system presents challenges as well. No system capable of 100+ different types of business processing and data transactions can perform each with streamlined perfection. ERP systems processing can be cumbersome. The systems are difficult to adapt to, especially for those used to fine-tuned, business-specific applications that are customized to a particular line of business. But the cost of so-called silo systems is clear:

- the resulting reduction in services and quality due to a lack of data integrity, data cohesion and data completeness when one entity's data exists across many systems
- the lack of efficiency in transacting data that traverse many lines of business

The University's commitment to using Banner as its authoritative system has, and continues to pay off. The University annually completes multiple projects to improve or increase functionality in or with Banner, and yet there remains much functionality that remains to be implemented. Data integrity is solid, production processing is well understood, technical and functional experts work extremely well together to troubleshoot and maintain Banner, Pacific is proficient in executing Banner projects of all sizes and scale, the University enjoys a good relationship with the Banner vendor, and the number of other software companies that partner with Banner is ever-increasing.