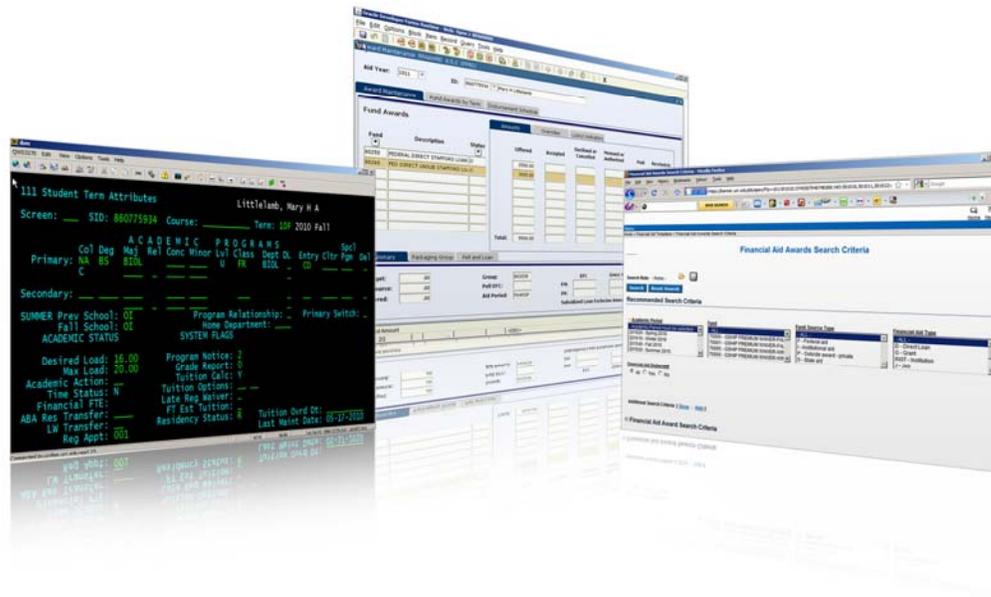


Financial Aid – A Phased ERP Approach

Computing & Communications



“The Banner Financial Aid integration with UCR’s SIS+ system is arguably one of the most complex projects that Enrollment Management has asked Computing and Communications (C&C) to implement. The time line was incredibly aggressive; C&C, without hesitation, availed the Office of Financial Aid with the necessary, expert resources and time required to seamlessly transition our staff and students from SIS+ to Banner...”

LaRae Lundgren
Assistant Vice Chancellor
Enrollment Management

Overview

How does an organization implement one component of a major ERP system, migrate from a legacy database, create complete transparency and integration of legacy and new systems, and do it "on time", WITH ABSOLUTELY NO INCREASE IN PERMANENT BUDGET? The following 5 steps made this a reality at UCR...

1. Implemented the base Banner system using UCR's common technical environment (Oracle on Solaris) enabling us to take advantage of our core competencies, eliminating the need for additional DBA, Systems Admin staff or additional training for the existing technical staff.
2. Because we used our existing common platform and infrastructure, we were able to carve out space from our existing hardware configuration to install an initial test system, secured and backed up within UCR's existing network, security and data management schemes, thus beginning development immediately.
3. As we had done many times before, we developed oracle web services which capitalized on Banner APIs for data retrieval/update to be utilized by the IBM mainframe CICS programs for use in Student Self Service on the web (Growl).
4. We modified existing IBM Mainframe web/CICS programs to invoke Oracle web services for real time retrieval of financial aid application and financial aid award data, as well as actual updating Banner for accepting of awards, submitting revision requests and submitting summer financial aid applications.
5. We capitalized on UCR's Oracle/Solaris Student Information Data Warehouse extract and import processes to feed admissions and student data into Banner for use in financial aid processes.

Background

Financial Aid was running in the old SIS+ environment on the IBM mainframe. It was the least table driven of the SIS modules (Student, Admissions, and Billing), yet, because of the amount of government regulation of Financial Aid, it was the most heavily maintained. Financial aid also had the least presentation in the SIS data warehouse. Importantly, as IBM mainframe COBOL programmers leave or retire, that skill set is becoming increasingly difficult to find. UCR decided to begin the migration of IBM applications to our common Oracle/Solaris infrastructure. Because of resource constraints, we decided to start with Financial Aid only, requiring integration between the Oracle and IBM platforms.

In January, 2009, UCR purchased only the Financial Aid component of Banner Student Information Systems (a complete student system of Admissions, Student Records, Billing, etc.). Banner Financial Aid consists of an Oracle database system, running in a Unix operating system on Solaris equipment. Since the rest of UCR's existing Student Information System (SIS), including Growl Student Self Service on the web would remain on the IBM, this team was charged with not only installing and deploying the new software, but also creating a process that would seamlessly integrate the completely disparate systems.

UCR built a suite of web services using APIs to allow the Growl student self service system to retrieve and update live data on the Banner database from the IBM, making the data access completely transparent to the students. In addition, by capitalizing on existing data warehouse extracts, we created SIS feeds and Banner imports to initially load up validation and control tables; and other feeds which run on a daily basis to have current student data available to all Banner processes. Using APIs, we also developed automated processes which update Banner with data supplied by 3rd party loan processors and non-C&C UCR entities. We currently have 55 million rows of data in nearly 2,000 application tables (not including system type tables). We also installed, and are populating on a daily basis, a Banner Operational Data Store and Enterprise Data Warehouse (ODS/EDW), which allows reporting tools of choice for producing ad hoc queries and BI reporting. In addition, we installed a Unix based automated Job Scheduler to support and manage all of the batch processes already numbering over 100 per day.

Highlights

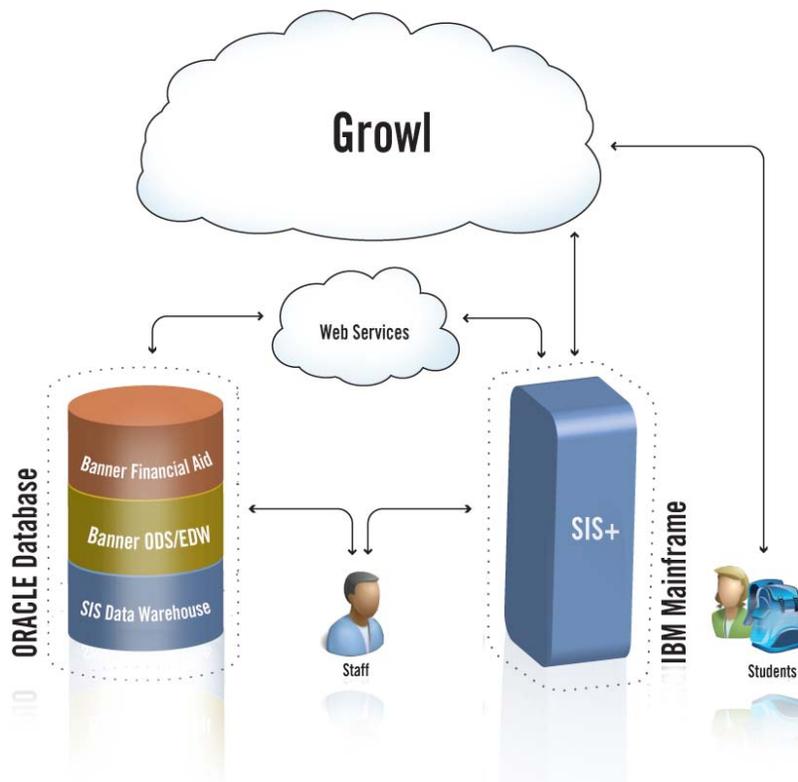
- Capitalizes on core competencies allowing us to install and manage the system with no permanent increase in human resources
- Completely transparent to students
- Includes Oracle Operational Data Store/Enterprise Data Warehouse populated on a daily basis via Oracle OWB
- Since go-live in February, have loaded 37,000 new financial aid applications, 30,000 application updates, 88,000 document requirements, and have awarded 15,000 admitted students
- Have taken over 3000 Summer Aid applications on Growl, updating Banner live via web services

Timeline

December, 2008	PO to purchase Banner Financial Aid
February, 2009	Banner installed on existing hardware
March 2009	Training begins for technical and functional staff
February, 2010	Banner went live, loading FAFSA applications to Production Banner
March, 2010	Document requirements available to students via Self Service
April, 2010	New students awarded ODS/EDW feeds nightly with Banner data

Technology and Implementation

A Phased ERP Approach



- Oracle/Solaris common standard infrastructure
- Web Services to provide real time access via web services to Banner by Student Self Service system running on IBM Mainframe
- Oracle Operational Data Store/Enterprise Data Warehouse
- Utilizes existing Oracle SIS Data Warehouse infrastructure to maintain student data in Banner
- ISE Job Scheduler works directly with Banner jobs to define dependencies and condition code processing

Testimonials

“The Banner Financial Aid integration with UCR’s SIS+ system is arguably one of the most complex projects that Enrollment Management has asked Computing and Communications (C&C) to implement. The time line was incredibly aggressive; C&C, without hesitation, availed the Office of Financial Aid with the necessary, expert resources and time required to seamlessly transition our staff and students from SIS+ to Banner. We have heard repetitively from SunGard/Banner staff that UCR’s Banner Financial Aid project is undoubtedly the model and best practice for such an implementation on a university campus, in specific terms of the university staff’s levels of expertise, their acute responsiveness, and their innovative solutions to challenges, which all culminates in a project being considerably under budget. The C&C staff have been the core technical engine that has driven this project far above Banner and UCR expectations.”

LaRae Lundgren
Assistant Vice Chancellor
Enrollment Management

“I am very satisfied with the interface between Banner and SIS+! Specifically with the seamless integration between the two systems. In testing, it was really neat to see the real time transaction when accepting awards via our self-service website (Growl) and Banner. It was also enlightening to see that once we posted an award on Banner, students were able to see it on Growl instantly. Thank you for all the behind the scenes "magic" you have put into this interface to make two completely different systems communicate with one another!”

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