

***BASIS I PROPOSAL
DEVELOPED FOR:
UNIVERSITY OF ARKANSAS, FAYETTEVILLE***

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Introduction

System and Revision Identification

BASIS is the Business and Administrative Strategic Information Systems project for the University of Arkansas. It will replace the University's Budget, Personnel, Payroll, Accounts Payable, Budgetary Control, General Ledger, Purchasing and Requisitions systems. This document is being developed to give the BASIS Steering Committee an overview of BASIS I, one project of BASIS.

For reader convenience, there is a glossary of acronyms provided at the back of this document.

Purpose and Scope of the System

BASIS development will focus on optimizing integration and interfacing with other existing administrative applications systems. The ADABAS/NATURAL technical environment will be used to produce online, real-time applications. The Transaction Approval Review Gateway via Electronic Transmission system (TARGET), developed by Computing Services, will control and monitor the online transaction review and approval process for these online applications.

At this time, BASIS is divided into two separate projects, BASIS I and BASIS II. The BASIS I team is developing the Personal Services Budget (PSB), Personnel (PERS) and Payroll (PAYROLL) systems to replace the present budget system and MSA Personnel/Payroll systems. The MSA Accounts Payable and Budgetary Control systems and the APS Purchasing and Requisitions system are being replaced by systems which the BASIS II team is developing. The MSA General Ledger system will be replaced in a later BASIS project.

Background

The BASIS project concept originated in late 1990 when certain changes to payroll withholding were mandated by the federal government. The effort to successfully modify the University's payroll system extended over three months and the ability to implement the new requirements was in serious doubt several times. The ability to maintain the University's payroll system on a continuing basis was questioned. As a result of this assessment, the BASIS project was begun in order to develop a new payroll/personnel system.

During payroll system design discussions, the decision was made to have budget feed payroll the current salary information. This change in the present budget/payroll philosophy required a budget rewrite, so the PSB system was included in the BASIS project. Also at this time, the need for a position tracking system was realized. The concept of a billet number was created to identify a position and billet management was included in PSB. With the advent of possible constraints on MSA systems from new operating systems, it was decided that all MSA components should be replaced. This replacement was included in the BASIS project, thus the split of the project into BASIS I and BASIS II. As BASIS I and BASIS II were being defined, it was decided that the MSA General Ledger system would be replaced at a later date.

BASIS I is led by David Holmes. El Orwig, Joy Steely and Katrina Bromley are the team members with Polly Croak assisting as consultant. David Wimberly is leading BASIS II with Sandra Twiggs, Paul Bixby and Kathryn Cantrell as team members.

System Overview

Features

BASIS I will provide for the position tracking, budget, personnel and payroll needs of the University. The following is a list of some of the major features of BASIS I:

- All legal requirements established at appropriate government levels for Human Resources management, Payroll reporting and Accounting standards will be met. The flexibility of BASIS I will allow future changes to be incorporated.
- Security will be handled by NATURAL Secured Menus (NSM).
- Electronic transactions entered online at the originating office will reduce the redundancy of data entry.
- Online editing of data will improve the overall quality of data, thus improving the reliability of reports. Less time will be required for correcting data as well.
- Electronic transactions will be available for review and approval immediately online, eliminating the time lag associated with handling paper forms.
- Updating of files will be done real time as opposed to MSA collecting data online but actually updating the files in batch. Processing the data only once will eliminate confusion and reduce computer processing time.
- Online visibility of data within an office will reduce the number of phone calls and memos required to supply information, thus freeing personnel to do more productive work.
- University-wide data distribution will eliminate data redundancy in outlying offices.
- NATURAL Batch Job Submission (JOBS) will give the user control of batch reporting.
- Data will be retained upon an efficient storage medium, specifically an ADABAS database.
- Data will be periodically archived to tape or cartridge medium.
- Position tracking and reporting will be improved with data availability and reliability.
- PSB will feed payroll rather than the reverse. This is a logical approach since the budget is prepared and entered before payroll. Pre-distribution information will also be provided by the PSB system prior to payroll processing.
- The Agriculture Department will budget to the project level. When the budget book is printed, the projects will be rolled to the company cost center level.
- Retroactive adjustments for grants or mistakes will be easier.
- Salary savings reporting will be improved with data availability and reliability.
- Online time sheet editing and processing at the originating office will reduce errors and turnaround time. This editing will eliminate the need for wage rate approvals as they exist today.

General Capabilities

The PSB system, which includes billet management and budget appointments, will replace the current budget system and meet the need to track positions. Most of the forms used today to request and fill positions will be online transactions controlled by TARGET. Most of the current budget paperwork will also become TARGET transactions.

The budget work cycle paperwork currently handled within each department for the upcoming fiscal year will be available for online updates on a pseudo database. These updates will not be TARGET transactions and will only be applied to the budget file after a specified date set by the Budget Office.

The PERS and PAYROLL systems will replace the current MSA HRMS and Payroll systems, respectively. They will correct some data limitations inherent in the MSA systems and provide for optimal accessibility to data and information for all pertinent users. The systems will be online and real-time so updates will be immediately reflected unlike the current MSA systems whereby updates are only made when the batch payroll process is run five times per month. Paper transactions will be reduced by incorporation of TARGET for electronic approval processing. The PDF will be a thing of the past.

System Objectives

The primary objectives of the BASIS I systems can be discussed under two main headings - online functions and batch functions. The online functions will capture, validate and maintain data specific to each system. The batch functions for each system will be specified in the discussion below.

The billet management portion of the PSB system will provide the ability to track a position from the time it is first allocated by the Arkansas State Legislature until the time it is permanently inactivated. This will be done through the use of the billet, a unique numeric identifier given to each position in the Appropriations Act (AA). The billet will be linked to the AA by a Legislative Title. The concept of job-sharing requires the billet to have a numeric suffix. This billet-suffix will be zero if the billet is not split. The batch functions of billet management will produce reports and notifications, provide system-wide changes and interface with other systems.

The budget appointment area of PSB will provide access to budget information. The budget will be accessed through a company cost center, a billet or an employee social security number. The PSB system will provide add and update capabilities to each department for their specific data, as well as provide the Budget Office access to all Budget data. The batch functions for budget appointments will produce reports and provide for system-wide changes and interface with other systems.

The primary function of PERS is to provide access to personnel information. It will provide add, deletion and update capabilities to the Human Resources Department for maintenance of this data. All functions of the Personal Data Form will be provided. Departments will be provided with access to their data on an update basis in order to facilitate distributed data entry and responsibility. The batch functions of PERS will produce letters, notifications, reports and provide for system-wide changes and interface with other systems.

The major objective of the PAYROLL system is to pay employees. It will provide add, deletion and update capabilities to the Human Resources and Payroll Departments for maintenance of this data. All current payroll functions will be provided. Departments will be provided with access to their data possibly on an update basis as well as view. Departments will be responsible for time sheet entry at their remote sites. The batch functions of the PAYROLL system will be used to produce payroll checks, insurance tapes and reports, retirement tapes and reports, letters, notifications, provide system-wide changes and interface with other systems.

Additional Considerations

User Procedures

In the past, the Department Table has been updated from the Tables system throughout the fiscal year. This caused confusion since the table and past reports did not use the same department alpha code. To avoid this confusion, the Department Table will now be updated only once a year, shortly before the new fiscal year starts. Updates include additions and changes.

The implementation of TARGET and the new BASIS I systems will eliminate the use of PDFs and will greatly reduce the use of PAFs. When departments become fully functional in the use of the BASIS I online screens and batch JOBS reporting functions, the Human Resources office workload will be reduced.

Conversion

Conversion of data from the current budget, personnel and payroll systems will take place during the testing process. Programs will be written to provide appropriate test data and convert current production data for use by the new systems. All test systems will run parallel with the current systems until the users and Computing Services are satisfied that all new systems are working properly. This will necessitate the dual entry of data on both systems for a period of time. This length of time and the complete methods of data entry on both systems will be set forth as the specifications for all BASIS I systems become more complete.

Impact to Existing Systems

Several existing systems will be affected by BASIS I. Institutional Research changes will be discussed in functional specifications for PSB. Current requirements for SAFARI will be met and SAFARI will provide information to PERS and PAYROLL about full-time and part-time student employees. This interface will be documented in the PAYROLL system functional specifications.

Security and Auditability

BASIS I security will be provided by the use of NSM, which is further documented in the NSM specifications. All owner/users will need to be trained to use NSM. The owners of BASIS I systems will be responsible for BASIS I security maintenance.

TARGET will maintain history files of all transactions to help provide auditability for BASIS I. Updates to production databases/files outside of TARGET will be restricted to production programs. These updates will also be stored in history files for auditability.

Hardware Requirements

All offices affected by BASIS I systems will need access to the BASIS I applications being developed. Since these applications will be located on the mainframe, the underlying assumption is all departments affected will have mainframe access. The above implies that when the BASIS I systems are operational, there will be a need for more mainframe computing than is currently provided. It is assumed that when BASIS I is implemented, these requirements will have been fulfilled.

Operational Plans

The online operation schedule will be the hours 7:00 am to 5:00 pm generally, dependent upon system availability. Batch processing will be scheduled after system backups and dependent upon automatic scheduling processed. Programs which are cyclic in nature will be identified and scheduled as far in advance as possible in order to optimize computing resources.

Any system problems will be promptly addressed by Computing Services. In most cases, these problems will be fixed prior to users arriving for the work day, but in the event of some unforeseen circumstance, users may be locked out of the system until problems are addressed and restoration of databases is made. Users will be notified in a timely manner of any abnormal events which result in the disruption of services.

Project Administration

User Responsibilities

To ensure the success of BASIS I, the offices of Business Affairs, Financial Affairs, Human Resources, Institutional Research and Treasurer will be responsible for the following items:

- Reviewing the Functional Specifications for the systems proposed in this overview and either accepting them or identifying the problems so they can be corrected in a revision to the document.
- Identifying the persons involved in the review and approval process necessary for TARGET.
- Preparation and entry of representative test data and confirmation of test results.
- Documenting any new office procedures required as a result of the BASIS I systems.
- Preparing user documentation for the BASIS I systems.
- Ordering any additional equipment required at the user site in order to utilize BASIS I.
- Training users in the use of BASIS I systems.
- Accepting the BASIS I systems once all acceptance criteria has been met.

Computing Services Responsibilities

Computing Services will be responsible for:

- Providing functional specifications on the systems proposed in this document.
- Providing reports to the BASIS Steering Committee regarding the current status of BASIS I.
- Developing and maintaining a detailed project plan which identifies the tasks and estimated time required to complete BASIS I.
- Assisting users in the preparation of user documentation for the BASIS I systems.
- Training a select group of individuals in the use of BASIS I systems.
- Developing and executing an implementation plan so that the BASIS I systems are operational for the user in a production environment.

Acceptance Criteria

All BASIS I systems will be tested with production data prior to running parallel with the current systems. After running parallel with the current systems, BASIS I systems will be moved into production when all test reports have been verified and all interfaces are completed to the satisfaction of the users and Computing Services.

Acronym Glossary

JOBS: Batch Job Submission

NSM: Natural Secured Menus

PAYROLL: Payroll System

PERS: Personnel System

PSB: Personal Services Budget

TARGET: Transaction Approval Review Gateway via Electronic Transmission

Approvals

Throughout the course of any project, it is likely that one or more changes to the systems as originally defined will be proposed. Features added or altered will constitute changes to the systems and will be handled according to the change control procedures documented in the functional specifications for each system. Major changes or additions will be analyzed to determine their impact to the overall project. Inclusion may be deferred to a later enhancement phase.

This document is intended to provide an overview of the PSB, PERS and PAYROLL systems being developed by Computing Services. The acceptance of this document will provide Computing Services staff with the necessary approval to continue the development of the systems described herein.

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