Banner Technical Training

Financial Aid Technical

Prerequisites

- **Banner Navigation training**
- **Introduction to Oracle**
- **If the participant does not possess Navigation and Oracle experience, he or she may find it difficult to complete the course objectives**

Prerequisites (Cont.)

- **Database preparation includes:**
  - Installation of the Banner Financial Aid System
  - Training accounts that are accessible so that every class participant can connect to the Unix/VAX/NT machine
  - Ability to connect to SQL*Plus and select from any Banner table

---

Banner Technical Training 7.x

Target Audience

- **The target audience for this training course includes:**
  - Technical Staff
  - "Power Users"
  - Financial Aid Managers who may use or teach others about Banner Financial Aid tables and processes

---

Introductions

- **Instructor**
- **Participants**
  - Organization
  - Banner experience
  - Relational database experience
  - Other relevant experience
  - Responsibilities

**Financial Aid Technical
Performance Objective**

- **To prepare the technical staff to support Financial Aid in the implementation and the operations of the Banner Financial Aid product**

Banner Technical Training 7.x

Task Objectives

- **Identify Banner Financial Aid Forms and tables**
- **Query the Banner Financial Aid Technical tables**
- **Follow Key Financial Aid Technical Processes**
- **Identify and read reports, processes, procedures and scripts in Banner**

Banner Technical Training

Financial Aid Technical Overview

Overview

- **SunGard Higher Education services**
- **Banner naming conventions**
- **Data directories and their contents**
- **Database structure**
- **Job Submission**
- **Population Selection**
- **Letter Generation**
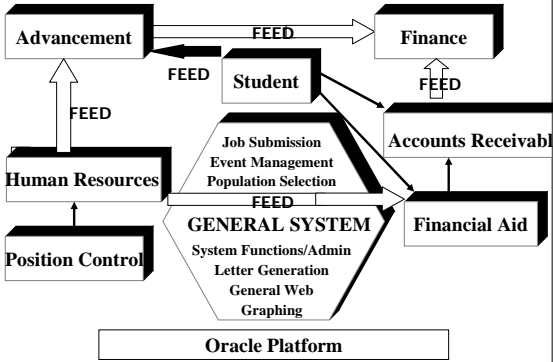- **Resources for data and help**
- **APIs**

SunGard Higher Education
Education Centers

- **Provide centralized location for training in Banner and Oracle**
- **Provide an environment where SunGard Higher Education clients can focus on learning**
- **Provide an opportunity to interact with colleagues from other institutions**

The Banner System

Financial Aid directories

BANNER							
ADMIN	ARSYS	COMMON	GENERAL	LINKS	INSTALL	FINANCIAL AID	UTILITY
V7	C		C			C	
ORATOOLS	FORMS		FORMS			FORMS	
OPSYS	PLUS		PLUS			PLUS	
	VIEWS		VIEWS			VIEWS	
	INSTALL		INSTALL			INSTALL	
	MISC/COM		MISC/COM			MISC/COM	
	COB/COBPCO		COB/COBPCO			COB/COBPCO	
	HELP		LOADER			LOADER	
	DBPROCS		HELP			HELP	
			DBPROCS			DBPROCS	
			GIF				
			ICO				
			EXE				

Banner Technical Training 7.x

4

Banner Objects Naming Convention:

- **All Banner objects adhere to a seven-character naming convention**

- Position Locations: **1 2 3 4 5 6 7**
  - - - - - - -
  Example: **S P R I D E N**

- **Characters identify a particular quality or attribute of the object**

Banner Objects Naming Convention:
Position Location 1

Position 1 – identifies the primary SYSTEM owning the object

- **A** - Advancement
- **F** - Finance
- **G** - General
- **N** - Position Control
- **P** - HR / Payroll / Personnel
- **R** - Financial Aid

- **S** - Student
- **T** - Accounts Receivable
- **V** - Voice Response
- **H** - New Products (Web)

- **W, Y, Z** - Reserved for Clients

Product Owners

- **Each primary system corresponds to a Banner product**

- **Each product has its own 'schema' in the ORACLE database**

- **Each schema has a unique name**

Banner Technical Training 7.x

Product Owners

- General . . . . GENERAL
- General Person . . . . . SATURN
- Student . . . . SATURN
- Advancement . . . . ALUMNI
- Finance . . . . FIMSMGR
- Accounts Receivable . . TAISMGR
- Position Control . . . . . POSNCTL
- Payroll . . . . PAYROLL
- Financial Aid . . . . FAISMGR
- Security . . . . BANSECR
- Procedures, Functions, Views . . BANINST1

Banner Objects Naming Convention:
Position Location 2

Position 2 –

- **identifies the system MODULE of the object**

- **differs for each Banner system**

Banner Objects Naming Convention:
Position 2 When Position 1 = R

B	Budgeting	N	Need Analysis
C	Record Creation	O	Common Functions
E	Electronic Data Exchange (EDE)	P	Packaging and Disbursement
F	Funds Management	R	Requirements Tracking
H	History and Transcripts	S	Student System Shared Data
J	Student Employment	T	Validation Form/Table
L	Logging		

Banner Technical Training 7.x

6

**Banner Objects Naming Convention:
Position Location 3**

Position 3 –

• **identifies the type of form, table or process.**

Banner Objects Naming Convention: Position 3 for Financial Aid

A	Application		Q	Query Form
B	Base Table		R	Rule Form
	Batch Mode			Repeating Table
E	Either Batch or Online Mode			Report
I	Inquiry Form		T	Temporary Table
O	Online Mode Only		V	Validation Table/View
P	Process			

Positions 4 - 7

• **Unique four-character acronym identifying the form, report, process, or table**

Banner Technical Training 7.x

7

Client-developed items

- W, Y or Z can be used as the first character for client-developed (non-Banner) applications built to coexist with Banner applications
- For client-developed reports or modules used within a Banner application,
  - the Banner System identifier should be used as the first character (i.e., R = Financial Aid) and
  - W, Y, or Z should be used as the second character

Form types

- **Menu**
  - Lists all related forms
  - Outlines the System
- **Application/Functional**
  - Allows one to enter, update, and query
- **Validation**
  - Lists all possible values for a given field
  - Information may be entered
- **Rule/Control**
  - Defines how variables, objects, and applications may be used
- **Query**
  - Allows information to be queried and returned to another form
- **Inquiry**
  - Used only to look up information

Validation forms

- Usually have TV as 2nd and 3rd characters
- Must have:
  - A code
  - A description
  - An activity date
- Validation tables
  - Table and form names are the same
- Examples :
  - Budget Type Validation table (RTVBTYP)
  - Budget Group Validation table (RTVBGRP)
  - Holds Validation table (RTVHOLD)
  - *Exception:* TVVAUTH – Title IV Authorizations

Banner Technical Training 7.x

8

Query forms

- The 3rd character is a *Q*
- Can only be reached when called by another form
- Cannot be used to change information (used strictly for lookups)
- Examples:
  —Address Type List (ROQADDR)
  —Loan Eligibility and Admissions Inquiry (RPQLELG)
  —Disbursement Validation Query Form (ROQMENU)

Inquiry forms

- The 3rd character is an *I*
- Cannot be used to change information
- Used strictly for lookups
- May be accessed through Direct Access
- Examples:
  — Applicant Need Analysis Application Inquiry Form (RNIAPPL)
  — Applicant Data Log Inquiry Form (ROIALOG)
  — Aid Year Inquiry Form (ROIAIDY)
  — Budget Inquiry Form (RBIBUDG)

Database Dictionary

- Set of tables and views that are used as a read-only reference about the database
- One of the most important parts of an Oracle database, because it contains:
  — Names of schema objects (tables, views…)
  — Names of Oracle users
  — Privileges and roles granted to each user
- Maintained internally
  — System table space
  — Select only

Banner Technical Training 7.x

9

Database Dictionary (Cont.)

- **In SQL*Plus, describe dictionary
  (or *desc dict*)**
- **SYS owns all base dictionary tables**
  - **Users have access to views of the data dictionary**
  - **No user should alter any object contained in the SYS
    schema**
- **During normal operation, Oracle verifies the existence of
  objects and checks whether users have proper access
  to them**

Database Dictionary (Cont.)

- **catalog.sql**
  - **Creates the Data Dictionary and public synonyms**
  - **Grants public access to the synonyms**

Database Dictionary (Cont.)

- **The Data Dictionary is divided by users. To retrieve basic
  information, use:**
  - **ALL: Lists all objects that a user has been granted access to**
  - **USER: Lists all objects that a user owns**
  - **DBA: Lists all objects in the database**

Product	Table Owner in Oracle	Module Owner in Banner
Accounts Receivable	TAISMGR	TAISUSR
Alumni	ALUMNI	ADISUSR
General	GENERAL	GENERAL
Finance	FIMSMGR	FIMSUSR
Payroll	PAYROLL	HRISUSR
Position Control	COSNCTL	HRISUSR
Financial Aid (Resources)	FAISMGR	FAISUSR
Student	SATURN	SAISUSR

Banner Technical Training 7.x

Data Dictionary Views

Examples:

ALL_OBJECTS	Object list and information
ALL_TABLES	Table list and information
ALL_TAB_COMMENTS .	Table description
ALL_TAB_COLUMNS . .	Column list and information
ALL_COL_COMMENTS .	Column description
ALL_CONSTRAINTS . .	Constraint list and definitions
ALL_CONS_COLUMNS .	Constraint columns

Data Dictionary Views

Examples (continued):

ALL_VIEWS	View list and definitions
ALL_INDEXES	Index list and information
ALL_IND_COMMENTS .	Index columns
ALL_SOURCE	Source information for objects (e.g. functions)

```
SQL>  SELECT  *  FROM  dict
        WHERE  table_name  LIKE  'ALL_%' ;
```

Referential Integrity

- **Oracle enforces relationships between tables through the use of Primary and Foreign key constraints**
- **Banner uses naming conventions for these constraints**

Banner Technical Training 7.x

11

Referential integrity (Cont.)

The relationship between Parent and Child rows
- **Child row has the Foreign key constraint and the Parent row has the Primary key constraint**
- **The Parent row cannot be deleted when a Child row exists**

_____

_____

_____

_____

_____

_____

_____

Constraints Naming Convention:

- **Five common constraint types used in Banner:**
  - **Primary Key**
  - **Foreign Key**
  - **Check**
  - **Unique**
  - **Not Null**

_____

_____

_____

_____

_____

_____

_____

Constraints Naming Convention:
Primary Keys

- **Designates a column or combination of columns whose values create a unique combination for each record.**

   Primary keys must be defined as follows:

   PK_ppppppp
   where PK denotes Primary Key
   ppppppp = primary key table name

_____

_____

_____

_____

_____

_____

_____

Banner Technical Training 7.x

12

Constraints Naming Convention:
Primary Keys

Examples:

PK_RTVFTYP → PK is RTVFTYP_CODE

PK_RORSTAT → PK is RORSTAT_PIDM +
RORSTAT_AIDY_CODE

Constraints Naming Convention:
Foreign Keys

- **FOREIGN KEYS can be defined in the following two situations:**

  —**Referential integrity constraints referencing the VALIDATION TABLE**

  —**Referential integrity constraints for APPLICATION HIERARCHY (Parent – Child)**

Constraints Naming Convention:
Foreign Keys – Validation Tables

- **Defining referential integrity constraints referencing the validation tables**

  FKn_fffffff_INV_ppppppp_CODE

  — **FK denotes Foreign Key**
  — **n = one-up number**
  — **fffffff = foreign key table name**
  — **ppppppp = primary key table name**
  — **CODE denotes reference to a validation table**

Banner Technical Training 7.x

13

Constraints Naming Convention:
Foreign Keys – Validation Tables

Example:

- A foreign key for table RORSTAT, column RTVAPRD_CODE is

  FK1_RORSTAT_INV_RTVAPRD_CODE

- RORSTAT_APRD_CODE values must be in the validation table RTVAPRD, column RTVAPRD_CODE

Constraints Naming Convention:
Foreign Keys – Application Hierarchy

- **Defining referential integrity constraints for application hierarchy**

  FKn_fffffff_INV_ppppppp_KEY

  — **FK denotes Foreign Key**
  — **n = one-up number**
  — **fffffff = foreign key table name**
  — **ppppppp = primary key table name**
  — **KEY denotes a reference to another table**

Constraints Naming Convention:
Foreign Keys – Application Hierarchy

Example:

- The foreign key for table RCRAPP2, columns RCRAPP2_AIDY_CODE, RCRAPP2_PIDM, RCRAPP2_INFC_CODE, RCRAPP2_SEQ_NO is

  FK1_RCRAPP2_INV_RCRAPP1_KEY

- RCRAPP2 KEY values must be in the RCRAPP1 table — a person must have a record in the RCRAPP1 table before they can have a record in RCRAPP2.

Banner Technical Training 7.x

14

Constraints Naming Convention:
Check Constraints

- **Explicitly defining a condition**

    CCn_cccccccccc

- **CC denotes Check Constraint**
- **n = one-up number**
- **cccccccccc = column name**

Check Constraint Example

RORSTAT Check Constraint

- **CC_1_V_RORSTAT_Y_OR_N**
    is a constraint for the column
    RORSTAT_INFO_ACCESS_IND

Constraints Naming Convention:
Unique Constraints

- **No two rows in the table can have the same value**
    for the unique key

    UKn_ppppppp_dddddddddd

- **UK denotes Unique Constraint**
- **n = one-up number**
- **ppppppp = unique key table**
- **dddddddddd = descriptive name**

Banner Technical Training 7.x

15

Referential Integrity Exercise 1.2.2 and 1.2.3

- **Write a simple script to use as a tool to examine constraints placed on tables by Banner designers.**
- **Save your work.**
- **Challenge script: Write a script that will show: constraint name, column name, position, type of constraint, constraint status and table name**

Data standardization

- **IDs**
- **Names**
- **Addresses**
- **Dates**

Identification numbers

- **Persons**
  - —**Enter an identification number of your choice or use the identification number that the System generates on any identification form (SPAIDEN)**
- **Non-persons**
  - —**Use the System-generated identification number**

Banner Technical Training 7.x

16

Names

Prefix	First Name	Last Name	Suffix
Mr.	William	Smith-Jones	III

==

- Upper/Lower Case — Use conventional upper- and lower-case letters.
- Last Names — Do not enter spaces within prefixed last names:

  | MacArthur | O'Connor | VanHusen |
  | St.John | deBolt | DuShen |

  Do not enter spaces within hyphenated last names:

  | Smith-Jones | Cochram-Ashley |

- First initials/middle name: — For names using a first initial and middle name, enter a period and one space between the initial and the name.

  Ex: R. Maureen Smith

- Prefixes/Suffixes — Use periods after prefixes and suffixes where applicable:

  | Miss | Mrs. | Mr. | Jr. |

Addresses

- Do not use a pound sign (#) when completing an Address field if your organization uses Banner Letter Generation. Banner Letter Generation recognizes a pound sign as a formatting command
- County codes are defined on the County Code Validation Form (STVCNTY)
- State and Province codes are defined on the State/Province Code Validation Form (STVSTAT). (State and Province names are entered into the State/Prov fields)

Dates

- Installation Control Form (GUAINST) radio button
- Date formats (MDY, DMY, YMD)
  - MDY   November 6, 2005   is entered as 11/06/05
  - DMY   November 6, 2005   is entered as 06/11/05
  - YMD   November 6, 2005   is entered as 05/11/06
- If you enter only part of the date, the rest of the current date defaults
- If you are including a date in query criteria, always include the century
- You can enter a dash (-) instead of a slash (/)
- For Job Submission dates, use *DD-MON-YYYY* format on the Process Submission Control Form (GJAPCTL)

Banner Technical Training 7.x

17

What is a PIDM?

- A "Primary Identification Master" uniquely identifies the records of one person or non-person entity in Banner
- An internal key field used to identify and store records
- Assigned automatically when new records are created
- Generated from an Oracle Sequence called PIDM_SEQUENCE through a function called GB_COMMON.F_GENERATE_PIDM

PIDMs

How to get the next available PIDM:

- `Select pidm_sequence.curval from DUAL;`
- `Select pidm_sequence.nexval from DUAL;`

API Oracle Sequence

- Pidm and ID sequencing uses Oracle Sequence Objects
  - PIDM_SEQUENCE
  - ID_SEQUENCE
- Established in gb_common package.
- ID Prefix stored in SOBSEQN

(Note: ID and PIDM no longer stored in SOBSEQN)

Banner Technical Training 7.x

Database Tool Set for SQL

**Building scripts to look at database
structure using SQL*Plus**

Check_col_comments.sql

```
/* Display column descriptions for a table */
column comments format a30 word_wrap
select column_name,comments
  from all_col_comments
 where table_name like
   upper('&Table_Name%')
 order by column_name
/
```

Check_tab_comments.sql

```
/* Display Description of a Table */
column comments format a30 word_wrap
select table_name, comments
  from all_tab_comments
 where table_name like upper('&Table_Name%')
   and table_name not like '%$%'
 order by table_name
/
```

Banner Technical Training 7.x

19

Check_cons.sql

```
/* Display table column constraints */
column constraint_name format a30 word_wrap
column column_name format a25
column ctype format a22 head 'Constraint Type'
   set linesize 130
select constraint_name,
       column_name,
       position,
       table_name
  from all_cons_columns
 where column_name like upper('&TableName%')
 order by table_name, position
/
```

Check_cons_all.sql

```
/* Display type of column constraint for a table */
column constraint_name format a30 word_wrap
column column_name format a25
column ctype format a22 head 'Constraint Type'
   set linesize 130
select all_cons_columns.constraint_name, all_cons_columns.column_name,
       all_cons_columns.position,
       decode(all_constraints.constraint_type,'R','Referential Integrity',
              'C','Not Null/Check','P','Primary Key' ,'U','Unique',
              'V','With Check Option', 'O','With Read Only') ctype,
       all_constraints.status, all_cons_columns.table_name
  from all_cons_columns, all_constraints
 where all_cons_columns.column_name like upper('&TableName%')
   and all_cons_columns.constraint_name = all_constraints.constraint_name
   and all_cons_columns.table_name = all_constraints.table_name
 order by table_name, all_constraints.constraint_name, position
/
```

Self-generating.sql

```
set head off
set echo off
/* At prompt enter name or partial name of a table.
   then enter part of a column name ie. code.          */
spool on
select 'select distinct '||column_name||' from
          '||table_name||';'
  from all_tab_columns
 where table_name like upper('&tables%')
   and column_name like upper('%&column%')
/
spool off
pause Press any key to continue
edit on.lst
pause Don't forget to set head on and set echo on before running any of these
     scripts.  Press any key to continue.
```

Banner Technical Training 7.x

Data Dictionary Exercise 1.2.1

- **Write a simple script to use as a tool to list information about Banner Financial Aid tables, to include table_name, table_comment. Script should include ability to ask user for name of table and should accept partial input.**
- **Save your script to a temporary directory on your computer for future use.**

Banner 8 Common Enhancements

PIN Maintenance Enhancements

- **PIN Security enhancements**
  - —**Stored in encrypted form**
  - —**Institutions can set strong password standards**
  - —**Better PIN reset mechanism**

- **Please refer to the *Banner General 8.0 Release Guide* for more details**

Internationalization Enhancements

- **Unicode support**
- **Additional IDs**
  - — **Unlimited IDs for each person in Banner**
  - — **New table on SPAIDEN**
- **Expanded fields**
  - — **Name, address, telephone, email, ID, currency amount and rate**

- **Please refer to the *Banner General 8.0 Release Guide* for more details**

Supplemental Data Engine

- **Allows storage of additional data that are not part of the existing Banner data model**
- **Tied to forms only indirectly**
- **No form or table customization required**
  - — **Generally not impacted by Banner upgrades**
- **Some limitations**
  - — **Not all tables, blocks and forms work with SDE**

- **Please refer to the *Banner General 8.0 Release Guide* for more details**

Supplemental User ID/Activity Date and Logging

- **This logging support allows you to choose which Banner Financial Aid tables and columns to log, and which actions to log, through the Logging Control Form (ROALOGC)**
- **Logging results appear on the Logging Activity Inquiry Form (ROILOGA)**
- **This enhancement adds user-defined table logging functionality to the Banner Financial Aid Budget, Student Employment, and Short Term Credit modules**
- **Please refer to the workbook and to the *Banner General 8.0 Release Guide* for more details**

Banner Technical Training 7.x

Partial Data Masking

- **The ability to partially mask a field, which was introduced initially in Banner 7.0, has been extended in Banner 8.0 to character fields**
- **You can allow a specified number of characters at one side of a field to remain readable while masking the remainder of a value**
- **Two new fields (Partial Character Mask and Partial Unmasked Length) have been added to the Data Display Mask Rules Form (GOTDMSK)**
- **Please refer to the workbook and to the *Banner General 8.0 Release Guide* for more details**

Review of Financial Aid Process

Student Applies for Aid

- **Free Application for Federal Student Aid (FAFSA)**
  - Student completes on an ANNUAL Basis
  - Output from FAFSA is the Student Aid Report (SAR)
  - Student receives SAR in the mail or email
  - School receives SAR electronically (ISIR)
  - Expected Family Contribution (EFC)
- **Institutional application**
- **Application for admission to the school**

Financial Aid Reviews Paperwork

File processing begins
- **Verification**
- **Request additional documentation**
- **Tracking Letter**
- **Documents required for packaging or disbursement**
- **Paperwork completed – 'File Complete'**
- **SAP review**

Packaging – Awarding of Aid

- **Federal Pell Grant determined by EFC and budget**
- **Campus-based aid (SEOG, Perkins Loan, and Federal Work Study) based on institutional packaging guidelines**
- **Scholarships – merit and need**
- **Loans – subsidized, unsubsidized and Plus**

Types of Financial Aid

- **Scholarships**
- **Work-Study**
- **Loans (Subsidized, Unsubsidized, Parent, Perkins)**
- **Grants**
  - — **Federal Pell Grant**
  - — **Federal Supplemental Opportunity Grant (SEOG)**
  - — **State Grants**
  - — **Institutional Grants**

Banner Technical Training 7.x

Award Letter

- Student notified of award
- Student accepts or declines aid
- Aid is accepted in the system
- Aid is then ready for memo, authorization, or payment

Fee Assessment and Billing

- Students register for courses
- Students are billed for courses
- Aid is applied to student accounts

---

Reporting

- Pell Grant Report Origination and Disbursements
- FISAP (Fiscal Operations Report)
- State Grant Reporting

Banner Technical Training 7.x

Banner Financial Aid Database Structure

- **We are going to review each area in Banner Financial Aid and look at:**
  — **Major Forms**
  — **Major Tables**
    - **Description**
    - **Column Comments**
    - **Constraints/Relationships**
  — **Validation Forms and Tables**
  — **Process Flow**
  — **Processes and Procedures**

Financial Aid System Process Flow
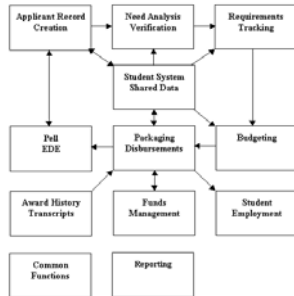
Applicant Record Creation

Created from several processes
  — **Data loads**
    - **EDE - Electronic Data Exchange**
    - **ISIR**
    - **CSS**
  — **Manual – Major Forms**
    - **RRAAREQ**
    - **RNANAxx**

Banner Technical Training 7.x

F/A Applicant Record Creation Forms

- Applicant Status Form   ROASTAT
- Financial Aid Record Maintenance   ROARMAN
- Need Analysis Form   RNANAxx
- Need Analysis Processing Form   RNAPRxx
- Need Analysis Document Verification Form   RNAVRxx
- Need Analysis Results Form   RNARSLT
- Applicant Requirements Form   RRAAREQ
- Applicant Budget Form   RBAABUD
- Award Form   RPAAWRD

Student Shared Data Forms

- Summary Academic History Inquiry Form   RSIHIST
- Financial Aid Enrollment Form   ROAENRL
- Basic Student Information Inquiry Form   RSISTDN
- Admissions Application Inquiry Form   RSIAPPL
- Account Detail Review Inquiry Form   RSIAREV
- Degrees and Other Formal Awards Inquiry Form   RSIDEGR
- Housing Information Inquiry Form   RSIHOUS
- Prior College Inquiry Form   RSIPCOL
- High School Inquiry Form   RSIHSCH
- Test Score Inquiry Form   RSITEST
- Veteran Certification Inquiry Form   RSIVETN
- Third Party Contract Inquiry Form   RSICONT
- Billing Exemption Inquiry Form   RSIEXPT

Data Load Procedures

Divided into three mandatory steps:

1. **Load External Data into Temporary Tables .**
   RCBCTxx (CSS) Nov-Dec Early Decision
   RCBTPxx (EDE)
   Temp Tables have Parallel names to Banner tables, e.g.
   ROTPERS → SPBPERS
   ROTIDEN → SPRIDEN
2. **Perform Match Process**
3. **Load Data into Production Database**

Banner Technical Training 7.x

Applicant Record Creation
Data Load Procedures (Cont.)

- **Procedures documented in Banner Financial Aid User Guide Chapter 2.**
  - **Let's review them.**
- **Check the latest release guides for the most up-to-date information**

Preparing for the Data Load Process

- **Set up the Data Source Code Validation Form (RTVINFC)**
- **Build the Interface Data Translation Rules Form (RCRTPTR)**
- **Enter Values and Rules on Common Matching Rules Form**
  — GORCMRL
  — GUAINST
  — GTVCMSC
  — GORCMSC
  — GORNAME
- **Build the Institutional Financial Aid Options Form (ROAINST)**
- **Build Data Source Rules Form (RCRDTSR)**

Preparing for the Data Load Process (cont.)

- **Move data to the $DATA_HOME/finaid directory for UNIX or DATA$HOME for VMS**
  — **Must have write privileges in directory**
  — **Rename file to:**
    - xxyyesar.tap **(EDE ISIR diskette or download),**
    - xxyyesat.tap **(EDE ISIR tape),**
    - xxyycssd.tap **(CSS diskette or download), or**
    - xxyycsst.tap **(CSS tape)**

Banner Technical Training 7.x

Running the Data Load Process

1. Load data to temp tables.	— Run RCBTPxx (Federal data) or — Run RCBCTxx (CSS PROFILE data)
2a. Match incoming records to existing Banner.	— Run RCPMTCH
2b. Review suspended records.	— RCRSUSP
3. Load records to production.	— Run RCRTPxx (Part 3 of Data Load)
4. Run the Delete Process	— Run RCPDTMP

Note: Run the RCPMTCH and RCRTPxx steps as close together as possible. This decreases the chances of someone adding new students online, which would make the New status (as determined by RCPMTCH) incorrect.
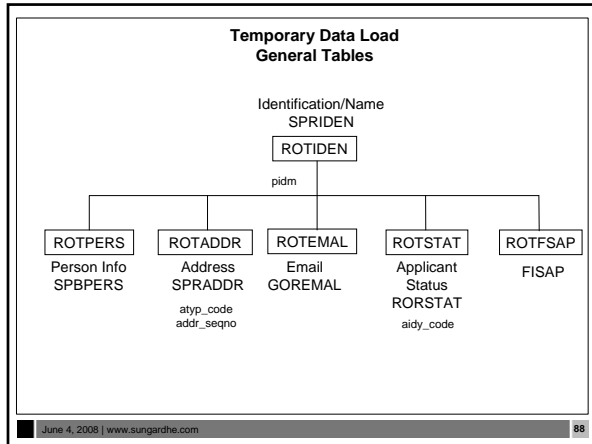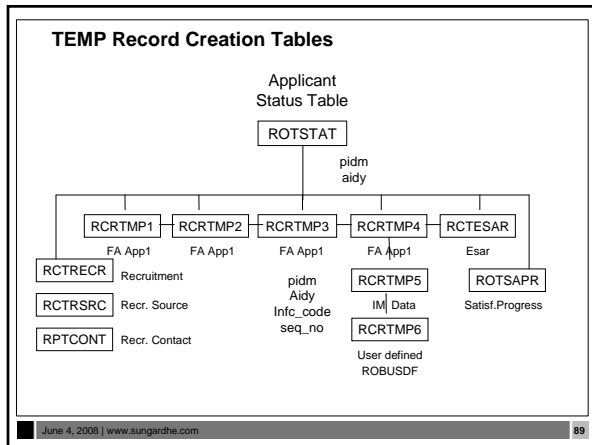

ISIR Notes

MUST maintain original ISIR records.
- **Set Data Load Parameter 12 = "Y" for RCRTPxx.**
- **Freezes ISIR records in RCRESAR and RCRAPPx.**

RCPDTMP Notes

If RCRSUSP is empty	No need to run.
If using the RCPMTCH status of *Hold*	Run RCPDTMP only at the end of the financial aid processing year
If deleting only selected records	You may choose to flag records for deletion on RCRSUSP and use the on-line *Delete Temporary Tables* option.

Default is "DELETE ALL." Once data is deleted from the temporary tables, it is LOST FOREVER!

Banner Technical Training 7.x

Temporary Data Load
General Tables

Identification/Name
SPRIDEN

```
         ROTIDEN
```
pidm

| ROTPERS | ROTADDR | ROTEMAL | ROTSTAT | ROTFSAP |

Person Info
SPBPERS

Address
SPRADDR

atyp_code
addr_seqno

Email
GOREMAL

Applicant
Status
RORSTAT

aidy_code

FISAP

TEMP Record Creation Tables

Applicant
Status Table

```
         ROTSTAT
```
pidm
aidy

| RCRTMP1 | RCRTMP2 | RCRTMP3 | RCRTMP4 | RCTESAR |

FA App1   FA App1   FA App1   FA App1   Esar

RCTRECR   Recruitment

RCTRSRC   Recr. Source

RPTCONT   Recr. Contact

pidm
Aidy
Infc_code
seq_no

RCRTMP5   IM Data

RCRTMP6

User defined
ROBUSDF

ROTSAPR

Satisf.Progress

Record Creation Forms and Tables

Information	Form	Table	Type
Temporary Tables	RCRSUSP	ROT…	Repeating
Applicant Status	ROASTAT	RORSTAT	Repeating
Applicant Requirements	RRAAREQ	RRRAREQ	Repeating
Need Requirements	RNANAxx	RCRAPP1..4, RCRESAR	Repeating

Banner Technical Training 7.x

30

Applicant Record Creation Exercises 2.1.1 and 2.1.2

- **Other than data load, how can new records be created?**
- **Explain what the process RCPDTMP does.**

Need Analysis/Verification Forms

Need Analysis [*RESNEED]
2008-2009 Need Analysis [*RESNEED09]
2008-2009 Need Analysis Processing [RNAPR09]
2008-2009 Supplemental Need Analysis [RNASU09]
2008-2009 Need Analysis Result [RNARS09]
2008-2009 Applicant Override [RNAOV09]
Applicant Need Analysis Application Inquiry [RNIAPPL]
Applicant Student Loan Data Inquiry [RNINSLD]
Calculated Need Analysis Detail Inquiry [RNINAIQ]
2008-2009 Need Analysis Global Policy Options Rules [RNRGL09]
Applicant Status [ROASTAT]
Applicant Pell Grant [ROAPELL]
Application Purge [RNAPURG]
NSLDS Transfer Monitoring Application [RNATMNT]

Need Analysis/Verification Tables

Description	Form	Table
INAS Global Policy Options Table	RNRGLxx	RNRGLBL
Applicant Need Analysis Override Table	RNAOVxx	RNROVRD
Needs Analysis Verification Table	RNAVRxx	RNRVRFY

Banner Technical Training 7.x

31

Need Analysis/Verification Table Relationships

Need Analysis Online Recalculation Process Flow

**Need Analysis/Verification
Processes and Procedures 2**

Banner Technical Training 7.x

32

Need Analysis/Verification Exercise

- **Write a script that selects Dependent students selected for Verification. Include student ID, aid year, verification and dependency. Prompt for Aid Year.**
- **Hints**
  - **Dependency = RCRAPP2_MODEL_CDE**
  - **Selected for Verification = RCRAPP1_VERIFICATION_MSG**
  - **Be sure to check for Current record**
  - **Be sure to compare SEQ_NO's and INFC_CODE's**

Requirements Tracking Forms

▢ Requirements Tracking [*RESTRACK]
   ▤ Applicant Requirements [RRAAREQ]
   ▤ Financial Aid Record Maintenance [ROARMAN]
   ▤ Applicant Requirements Mass Entry [RRAMASS]
   ▤ Applicant Comments [RHACOMM]
   ▤ Applicant Immediate Process [ROAIMMP]
   ▢ Requirements Tracking Control [*RESTRACKCM]

Requirements Tracking Process Flow

Banner Technical Training 7.x

33
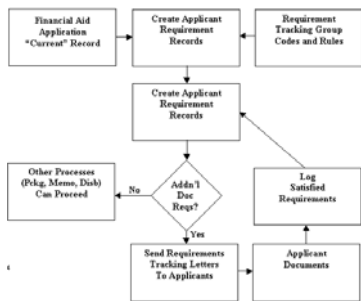
Requirements Tracking Tables & Views

Description	Form	Table
Tracking Group/Requirements Rules	RRRGREQ	RRRGREQ
Applicant Requirements	RRAAREQ	RRRAREQ
Tracking Requirement Message Rules	RORMESG	RRRTMSG
Requirements View		RRVAREQ
Object Access F/A Requirements View		RRVREQ1

Requirements Tracking
Processes and Procedures

1. **RTVTREQ – Define tracking requirement codes**
2. **RTVTRST – Define tracking requirement status codes**
3. **RTVTGRP – Define tracking groups**
4. **RRRGREQ – Develop tracking group requirements for each group. Indicate which documents are required for each specific tracking group**
5. **RORRULE – Develop tracking group rules associated with each group**
6. **RRRTMSG – Develop specific messages for each tracking code, if desired**

Requirements Tracking
Processes and Procedures (Cont.)

- **ROBBGRP (GJAPCTL form)**
  — **Performs Budget, Tracking and/or Packaging group assignment in** batch mode **for all applicants or a selected population of applicants**
- **ROOAUTO (ROAIMMP form)**
  — **Performs Online Budget, Tracking and Packaging group assignment for a** specified applicant
- Both ROBBGRP and ROOAUTO were made obsolete in the Financial Aid 7.5 release

Banner Technical Training 7.x

34

Requirements Tracking
Processes and Procedures (Cont.)

- **RORGRPS**
  - —**Replacement for ROOAUTO and ROBBGRP**
  - —**Can be run in batch mode or in online mode**
  - —**Process a single applicant (in online mode)**
  - —**Use a previously defined population selection to process all applicants, or to process only applicants in *Wait* status**
  - —**Assign the applicant or applicants to budgeting groups, tracking groups, or packaging groups, or any combination of the three group types**

Tracking Group Assignment Process

Tables/Fields Updated
  - —**RRRAREQ – Applicant Requirements Table**
    - • **One row per requirement**
  - —**RORSTAT - Applicant Status Table**
    - • **RORSTAT_TGRP_CODE**
  - —**RLRSTAT – Applicant Status Log Table**
    - • **RLRSTAT_TGRP_CODE**

RORRULEs

- • **Major Form RORRULE**
- • **Compiled by ROOGSQL**
  - —The Online Group Assignment Selection Criteria Generation process creates a SQL statement from the Budgeting, Tracking and Packaging Group Selection rules created by the Financial Aid Selection Rules Form (RORRULE)

Banner Technical Training 7.x

35

Requirements Tracking Exercise 1

- **Write a script that selects students whose tracking requirements are not satisfied. Include Student ID, Aid year, Requirement Code, Status and Satisfied Indicator. Prompt for Aid year.**
- **Modify your script to look for one particular requirement.**

Requirements Tracking Exercise 2

- **Write a script that will find all students who have a one time tracking document. Also include a description for the tracking document code.**

RORRULE Exercise 3.2.2

- **Write a rule to capture in a tracking group those individuals that have a 'C' code on their current record.**
  - —**You will need to create a tracking group and tracking code**
  - —**To complete this assignment, you should be able to run ROBBGRP and place a requirement on student records that fit the above category**

Banner Technical Training 7.x

Student System Shared Data

Student System Shared Data [*RESSHARE]
  Summary Academic History Inquiry [RSIHIST]
  Basic Student Information Inquiry [RSISTDN]
  Admissions Application Inquiry [RSIAPPL]
  Account Detail Review Inquiry [RSIAREV]
  Degrees and Other Formal Awards Inquiry [RSIDEGR]
  Housing Information Inquiry [RSIHOUS]
  Prior College Inquiry [RSIPCOL]
  High School Inquiry [RSIHSCH]
  Test Score Inquiry [RSITEST]
  Veteran Certification Inquiry [RSIVETN]
  Third Party Contract Inquiry [RSICONT]
  Billing Exemption Inquiry [RSIEXPT]

Student System Shared Data Tables and Views

- **RORENRL**   - Enrollment Status
                        Financial Aid Captured data
- **ROVSTDN**   - Basic Student Information
- **ROVADAP**   - Admissions selection
- **ROVADxx**   - Admission information
- **ROVDGMR**   - Degree information

Student System Shared Data Process Flow

Banner Technical Training 7.x

37

Student System Shared Data Process Flow (cont.)

112

Student System Process Flow

113
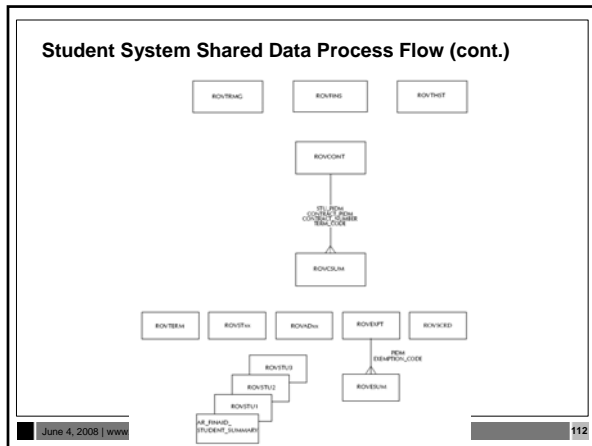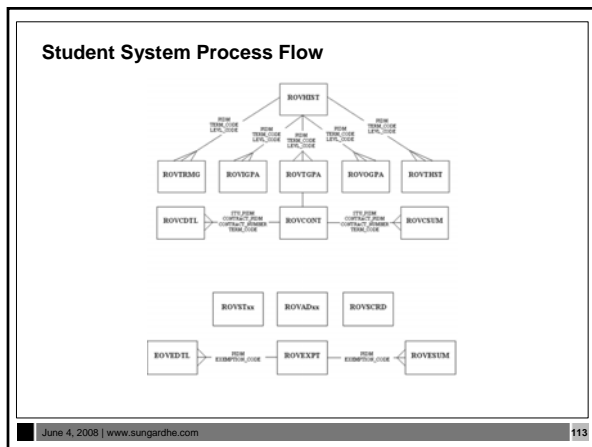
**Student System Shared Data
Processes and Procedures**

- **RSRENRL - Financial Aid Enrollment Hours**
  — **run after drop/add**
- **Add credit and billing hours from student enrollment to Financial Aid**
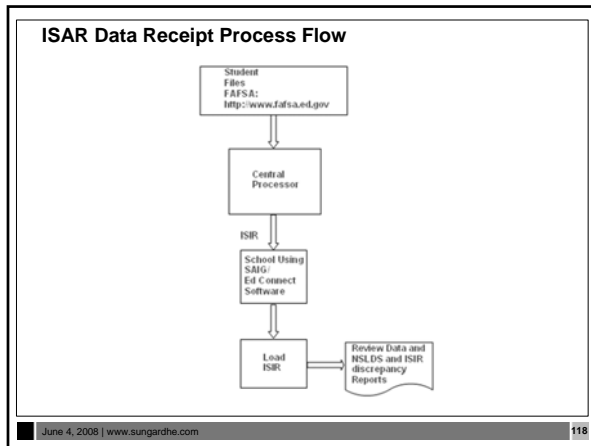- **C process, used to 'capture' or 'freeze' hours**

114

Banner Technical Training 7.x

38

Financial Aid Enrollment Hours Process

- **Table Updated**
  —**RORENRL**
- **Source Table**
  —**SFRSTCR**

Electronic Data Exchange
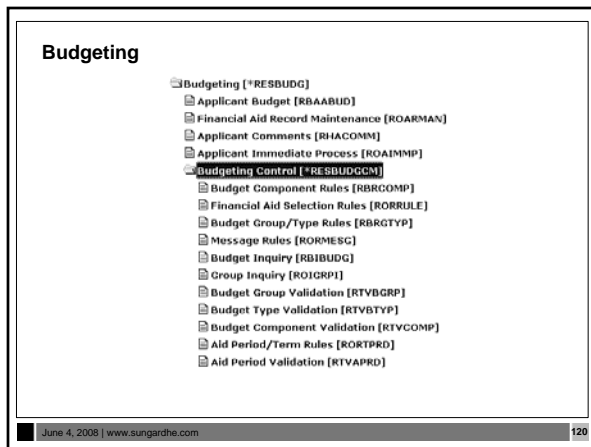
Electronic Data Exchange [*RESEDE]
  2007-2008 Electronic Data Exchange [*RESEDE08]
  ISIR Correction/Request [REACORR]
  Batch Control [RPIBATC]
  COD Document Control [REICODD]
  2007-2008 Miscellaneous Results Inquiry [RNIMS08]
  2007-2008 Grant Origination/Acknowledgement [REAOR08]
  2007-2008 Grant Disbursement/Acknowledgement [READI08]
  Rejection Code Validation [RTVRJCT]
  Summary Statement of Account Inquiry [REISSOA]
  Detail Statement of Account Inquiry [REIDSOA]
  Data Request Record [RERRDRQ]
  Multiple Reporting Record Inquiry [REIRMRR]
  COD Year to Date Grant Summary [REIYTDS]
  COD Year to Date Grant Origination [REIYTDO]
  COD Year to Date Grant Disbursement [REIYTDD]
  COD Grant Reconciliation [REIRECN]
  NSLDS Transfer Monitoring Application [RNATMNT]
  COD Identifier [REASTID]

Electronic Data Exchange

Description	Form	Table
Applicant ESAR	RNANAxx	RCRAPPxx, RCRESAR
Batch Control Form	RPIBATC	REBDRCT
EDE Corrections	REACORR	ROBALOG
XML COD Document Control	REICODD	RERCODD
YTD Disbursement Record Table	READIxx	REBYTDD
PELL Origination Table	REAORxx	REBPAYV

Banner Technical Training 7.x

39

ISAR Data Receipt Process Flow

Student
Files
FAFSA:
http://www.fafsa.ed.gov

↓

Central
Processor

ISIR
↓

School Using
SAIG/
Ed Connect
Software

↓

Load
ISIR → Review Data and
NSLDS and ISIR
discrepancy
Reports

Student → Central Processor → CORExxOP → Import Error
Messages
(RERFlxx)

Signed ISIR

Enter Changes
(RNANAxx,
RNAVRxx,
RNAOVxx or
RNAPRxx)

IDCOxxOP

Banner Dataload
Processes to
Import Corrected
ISAR Records

**EDE ISIR
Data
Correction
Process Flow**

Process Latest
Changes
(RLRLOGG)

Resubmit
Prior
Corrections
(ROAALOG)

Report on
Changes Loaded
(RORALOG)

Review
Corrections
(REACORR)

View Changes
Logged for
Individual Students
(ROIALOG)

Control Report
Lists Corrections
(RERCRCR)

Create Batch
Request
(REBCDxx)

View Outgoing
Batch Information
(RPIBATC)

CORRxxIN

View Changes
Logged for the
Institution
(ROIILOG)

ED Connect
Software

Budgeting

Budgeting [*RESBUDG]
Applicant Budget [RBAABUD]
Financial Aid Record Maintenance [ROARMAN]
Applicant Comments [RHACOMM]
Applicant Immediate Process [ROAIMMP]
Budgeting Control [*RESBUDGCM]
Budget Component Rules [RBRCOMP]
Financial Aid Selection Rules [RORRULE]
Budget Group/Type Rules [RBRGTYP]
Message Rules [RORMESG]
Budget Inquiry [RBIBUDG]
Group Inquiry [ROIGRPI]
Budget Group Validation [RTVBGRP]
Budget Type Validation [RTVBTYP]
Budget Component Validation [RTVCOMP]
Aid Period/Term Rules [RORTPRD]
Aid Period Validation [RTVAPRD]

Banner Technical Training 7.x

40

Budgeting Tables

Description	Form	Table
Applicant Budget Table	RBAABUD	RBRABUD
Applicant Budget Component Table	RBAABUD	RBRACMP
Mixed Enrollment	RBAABUD	RBRMIXD

Budgeting Processes & Procedures

- **There are no Budgeting processes or procedures.**
- **Two reports:**
  —**Applicant Budget Report (RBRABUD)**
  —**Budget Component Report (RBRBCMP)**

Budgeting Exercises

- **Write a script that will list student ID, aid year, budget type code for aid year 0708.**
- **Now modify your script to include the budget component code and amount.**

Banner Technical Training 7.x

Funds Management

Funds Management [*RESFUND]
- Fund Management [RFRMGMT]
- Funds Management [ROAMGMT]
- Fund Budget Inquiry [RFIBUDG]
- Federal Fund ID Inquiry [RFIFFID]
- Federal Rules Inquiry [RPIFEDR]
- Default Award and Disbursement Schedule Rules [RFRDEFA]
- Fund Award and Disbursement Schedule Rules [RFRASCH]
- Financial Aid Selection Rules [RORRULE]
- Fund Base Data [RFRBASE]
- Fund Source Code Validation [RTVFSRC]
- Financial Aid Fund Type Validation [RTVFTYP]

Funds Management Major Tables

Description	Form	Table
Fund Base Data Table	RFRMGMT	RFRBASE
Fund/Budget Component Table	RFRMGMT	RFRBCMP
Federal Fund ID Table	ROAMGMT	RFRFFID (delivered)
Year Specific Data for Fund – links by fund code.	ROAMGMT RFRMGMT	RFRASPC

Funds Management
Processes & Procedures
- **There are no processes in Funds Management other than procedures for the functional staff to follow. They may need assistance with RORRULEs.**

Banner Technical Training 7.x

42

Slide 127

Funds Management Process Flow

```
Fund          Create Fund        Standard Award
Base Data      Data               & Disbursement
RFRBASE        Aid Year-Specific  Schedules
               RFRASPC -RFRMGMT   RFRDEFA

                Std.        No     Create Fund-
                Award              Specific
                Sched.             Award
                                   Schedule
                                   RFRASCH
                Yes

                Std.        No     Create Fund-
                Disb.              Specific
                Sched.             Disbursement
                                   Schedule
                Yes                            RFRASCH

         Create Fund           Packaging
         Awarding              Process
         Rules
    RORRULES                       RPEPCKG

         Create Fund
         Disbursement
         Rules
```

Slide 128

Funds Management Exercises

- **Write sql that will select fund code, fund title and detail code of all existing funds.**

Slide 129

Packaging and Disbursement

Packaging and Disbursement [*RESPACK]
- Package Maintenance [RPAAPMT]
- Award Maintenance [RPAAWRD]
- Financial Aid Record Maintenance [ROARMAN]
- Fund Award Inquiry [RPIFAWD]
- Fund Award Term Inquiry [RPIFTRM]
- Award Acceptance Mass Entry [RPAMACC]
- Award Offer Mass Entry [RPAMOFF]
- Resource Maintenance [RPAARSC]
- Applicant High School Data [ROAHSDT]
- Applicant Comments [RHACOMM]
- Applicant Immediate Process [ROAIMMP]
- Contracts and Exemptions Payment Inquiry [RPIARPY]
- Applicant Award by Term [RPIATRM]
- Disbursement Results [ROIDISB]
- Packaging and Disbursement Control [*RESPACKCM]

Packaging and Disbursement Control [*RESPACKCM]
- Financial Aid Selection Rules [RORRULE]
- Algorithmic Packaging Rules [RPRALGR]
- Financial Aid CIP Code Rules [RPICIPC]
- State Advanced/Honors Program Codes [RPISAHP]
- Packaging Group Fund Rules [RPRGFND]
- Default Packaging Rules [RPRDEFR]
- Packaging Rules [RPRPCKR]
- Exemption Rules [RPREXPT]
- Third Party Contract Rules [RPRCONT]
- Packaging Options [RPROPTS]
- Audit Grading Mode [RPRAUDT]
- Packaging Group Fund Source Maximums Rules [RPRFSRC]
- Packaging Group Fund Category Maximums Rules [RPRFCAT]
- Group Inquiry [ROIGRPI]
- Financial Aid Degree Rules [RPRDEGR]
- Algorithmic Packaging Rule Code Validation [RTVALGR]
- Award Status Validation [RTVAWST]
- Fund Category Validation [RTVFCAT]

Banner Technical Training 7.x

43
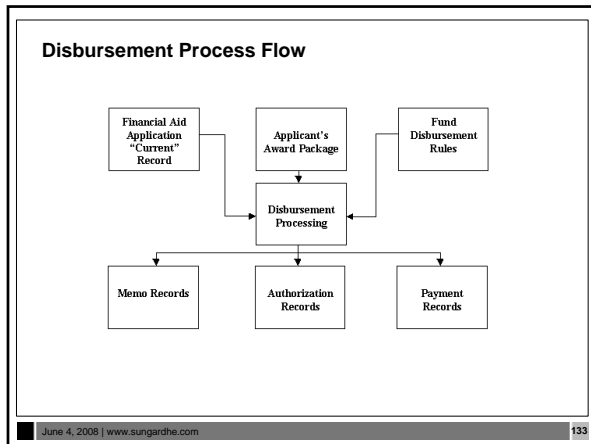
**Packaging and Disbursement
Major Tables**

- RPRAWRD -   Applicant award table
- RPRATRM -   Applicant award by term table
- RPRADSB -   Applicant Disbursement table
- RPRLAPP -   Loan application table
- RPRLADB -   Loan Disbursement Schedule
- RPRLTRM -   Loan Schedule Rules Table

---

Packaging Process Flow
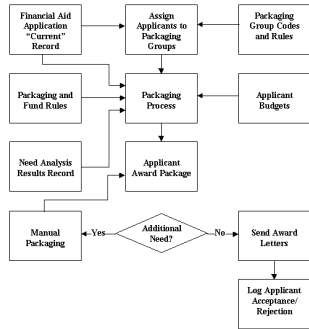
Algorithmic Packaging

- **Algorithmic packaging allows clients to use a business rules engine to automatically package students in accordance with the institution's awarding philosophy**
- **In addition to the algorithmic packaging business rules solution, many other changes have been made to enhance the packaging process**
- **Forms and processes have been added or modified to provide a more complete means of automatically packaging students through the use of new algorithmic packaging forms in conjunction with pre-existing Banner Financial Aid rules forms**

Banner Technical Training 7.x

44

Disbursement Process Flow

Loan Process Flow
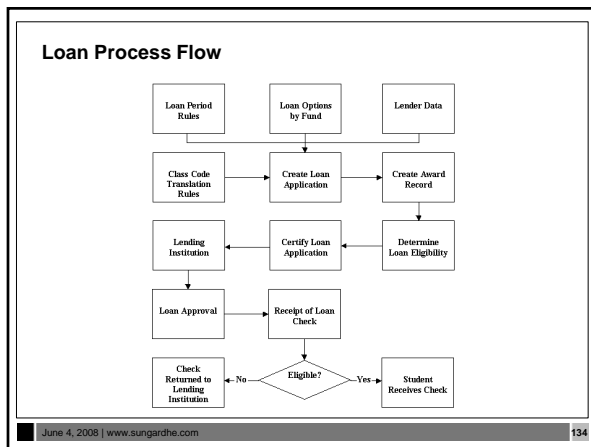
Packaging and Disbursement Packaging Process

- **Packaging Process (RPEPCKG)**
  —**Actual or Simulation**
  —**RPBPDRV - Creates reports**
    - **RPBAWRD.lis – The Award Report that results from the packaging run**
    - **RPBFUND.lis – The Fund Report that results from the packaging run**

Banner Technical Training 7.x

45

Packaging and Disbursement
Pell Grant Process

- **Pell Grant Calculation Process (RPEPELL)**
  - —**Online, batch or from database trigger**
  - —**Triggers when certain data changes on forms:**
  - —**RNARSLT, RBAABUD, RNASUxx, RNANAxx and ROAPELL**
    - • **Note: RNARSLT will become RNARSxx as of 0607**

  (run before packaging)

RFMS Pell Grant Origination Record Processing
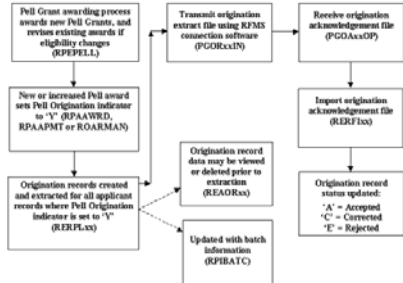
Packaging and Disbursement Online Award Validation Process

- **Online Award Validation Process (RPOVLDT)**
  - — **Validates all awards within an applicant's package to ensure that no changes made to the applicant or the fund(s) invalidate the award(s)**
  - — **Ascertains whether the applicant is eligible for an individual fund being added to the applicant's package either on-line or during the Packaging process**
  - — **Validates that the applicant is eligible for system or manual disbursements from the awards within the applicant's package**
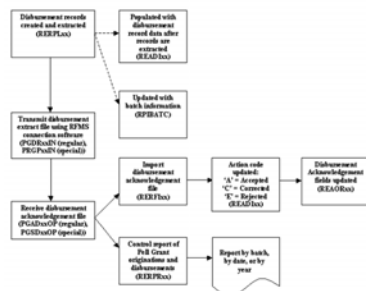
Packaging and Disbursement Batch Validation Process

- **Batch Validation Process (RPBVLDT)**
  — **Validates all awards within an applicant's package to ensure that no changes made to the applicant or the fund(s) invalidate the award(s)**
  — **Ascertains whether the applicant is eligible for an individual fund being added to the applicant's package either on-line or during the Packaging process**
  — **Validates that the applicant is eligible for system or manual disbursements from the awards within the applicant's package**

139

Packaging and Disbursement
Disbursement Process

- **Disbursement Process (RPEDISB) online and batch**
  - Passes the amount of deferred Financial Aid available to an applicant within a specific term to the BANNER Student system. This is displayed as a memo transaction in the Student Billing module.
  - Passes the amount of Financial Aid available to be disbursed to an applicant within a specific term to the BANNER Student system. This is displayed as an authorization in the Student Billing module.
  - Passes the amount of Financial Aid scheduled to be disbursed to an applicant within a specific term to the BANNER Student system. All scheduled disbursements with a date less than or equal to the processing date that have not been disbursed will be processed. These are displayed as payment transactions in the Student Billing module.
  - Exercise

140

RFMS Pell Grant Disbursement Record Processing

141

Banner Technical Training 7.x

47

RFMS Multiple Reporting Record (MRR) Processing

RFMS Statement of Account, Year to Date Record Processing

Packaging and Disbursement Exercise 3.2.3

- **Write a script that will list the student IDs, aid year, fund code, and Paid Award Amount for a student whose aid year is entered as parameters.**

Packaging and Disbursement Exercise 3.2.4

- **Write a script to list the student IDs, aid year, term code, fund description, and offered award amount for the term of a student whose term code is entered as parameters.**
  —**Allow for the use of wild card entry for term code**

Common Functions

Financial Aid Common Functions [*RESCOMN]
General Person Identification [SPAIDEN]
Person Name/ID Search [ROAIDEN]
FISAP Person Maintenance [ROAF8AP]
Aid Year Inquiry [ROIAIDY]
Group Inquiry [ROIGRPI]
Data Log Inquiry [ROIILOG]
Logging Activity Inquiry [ROILOGA]
Message Code Inquiry [ROIMESG]
SAR ID Inquiry [ROISARI]
Financial Aid Term Code Inquiry [ROITERM]
Applicant Common Functions [*RESAPPLCT]
Financial Aid Common Functions Control [*RESCOMNCM]
Data Management [*RESDATA]

Common Functions
Major Tables 1

Applicant Status Table	RORSTAT	Satisfactory Academic Progress Rules Table	RORSAPR
PELL Grant Payment Schedule Table	RORPELL	Financial Aid Messages	RORMESG
Applicant Holds Table	RORHOLD	Financial Aid Enrollment Table	RORENRL

Banner Technical Training 7.x

49

Common Functions
Major Tables 2

Audit Log Form/Data Code Table	RORDVAL	Credit Hours Table	RORCRHR
Audit Log Table	ROBALOG	Financial Aid Institution Table	ROBINST
Applicant User-Defined Data Table	ROBUSDF	Group Selection Rules Base Table	RORGDAT
Selection Identifier Compiled Statements	RORCMPL	Generated SQL Selection Identifier Table	RORGSQL

Common Functions Process Flow

Satisfactory Academic Progress Process

Banner Technical Training 7.x

SAP History Exercise 3.2.5

- **Write a script to select ID, name, progress code, and term for each student coded in Banner for Satisfactory Academic Progress.**
    - **Some students are coded for more than one term**
    - **If students have more than one term, select the most current term and select that term's progress code**
    - **Hint: The academic progress table is RORSAPR**

Reporting

3. Reports and Processes

Chapter 3   Reports and Processes

Financial Aid Report/Process Descriptions

| Report	Name	Description
RBRABUD	Applicant Budget Report	Print applicants' budgets by budget type and budget component
RBRBCMP	Budget Component Report	Lists budget component amounts by budget group, budget type and aid period
RCBCTxx	Financial Aid CSS Data Load, Part 1	This data load process loads financial aid CSS PROFILE applicant records into the BANNER Financial Aid System. Only those institutions that license the CSS PROFILE Data Load Process from SCT will receive the RCBCTxx programs.
RCRTPxx	Financial Aid Data Load, Part 1	The data load process loads financial aid applicant records into the BANNER Financial Aid System.
RCRCOMP	Data Load Comparison Process	Compares incoming applicant data from tape to existing applicant data on database
RCRTPxx	Financial Aid Data Load, Part 3	Loads new and matching applicant records to the permanent tables
RERBCR	EDE Correction/ISSAR Request	Lists EDE corrections and ISSAR requests that were

---

Commonly Used Reports

- **Financial Aid Roll Rule Report (ROPROLL)**
    - **Create the scripts that rolls year rules**
    - **by aid year (Group, Fund, Budgeting, Tracking, Packaging)**
- **FISAP Report (RORFSxx)**
    - **Prints FISAP report**
- **Others you need to know!**
    - **Disbursement Process (RPEDISB)**
    - **Pell Awarding Process (RPEPELL)**
    - **Packaging Process (RPEPCKG)**
- **RNEINxx**
    - **- INAS**

Banner Technical Training 7.x

51

Award History/Transcripts

- History and Transcripts [*RESHIST]
  - NSLDS Transfer Monitoring Application [RNATMNT]
  - Transcript Rules [RHRTRNS]
  - Pre-Banner Award Summary [RHAPBAW]
  - Prior Institution Transcript [RHAPTRN]
  - Fund Sequence History Inquiry [RHIAFSH]
  - Applicant Comments [RHACOMM]
  - Transcript Information [RHATINF]
  - Financial Aid Transcript Request [RHARQST]

Award History/Transcripts Process Flow
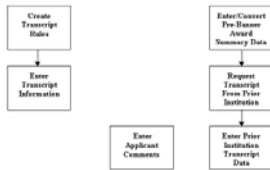
Student Employment

- Student Employment [*RESEMPL]
  - Student Employment Authorization [RJASEAR]
  - Student Employment Referral [RJASERF]
  - Student Employment Mass Entry [RJASEME]
  - Student Employment Work History [RJISEWH]
- Student Employment Control [*RESEMPLCM]
  - Student Employment Default Rules [RJRSEDR]
  - Payroll Load Control [RJRPAYL]
  - Placement Rules [RJRPLRL]
  - Placement Base Data [RJAPLBD]
  - Job Title Base Data [RJRJOBT]
  - Job Title Requirements [RJRJREQ]
  - Referral Status Validation [RTVRFST]
  - Employment Authorization Status Validation [RTVAUST]

Banner Technical Training 7.x

Student Employment
Major Tables

Placement Base Data Table	RJBPLBD
Job Title Table	RJBJOBT
Student Employment Authorization Table	RJRSEAR
Student Employment Referral Table	RJRSERF
Student Employment Work History Table	RJRSEWH

Student Employment
Process & Procedures

- **Payroll Load Process (RJRLOAD)**
  - —**Interface payroll data from Banner Human Resources to Banner Financial Aid**

Student Employment Exercise

- **Write a script to list student ID, aid year and job code.**
- **Modify the script to include the job description**

Banner Technical Training 7.x

Database Structure Exercise 3.2.6

- **Write a script to return those students that have different EFCs.**
  - —**The script should return student ID, formatted name, EFCs and indicate if record has a 'lock'**
  - —**Prompt the user for aid year**

**Database Structure
Advanced Exercise 3.2.7**

- **Write a script to select ID, name, unmet need, EFC, FWS work preference, and total paid awards for each student. Use wild card selection for aid year**
- **Modify your script to select only students that indicated they wanted FWS for 1998-99**
- **Modify your script to select students where they have any awards paid for aid year**

Logging

- **Institution Financial Aid Options Form (ROAINST) (audit logging)**
  - —**Budget logging**
  - —**Needs Analysis logging**
  - —**Packaging logging**
  - —**Pell Correction logging**
- **Audit Log table (ROBALOG)**

Financial Aid Logging (Cont.)

- **Let's review logging in the Banner Application.**

New Year Start
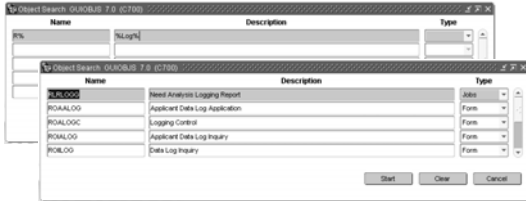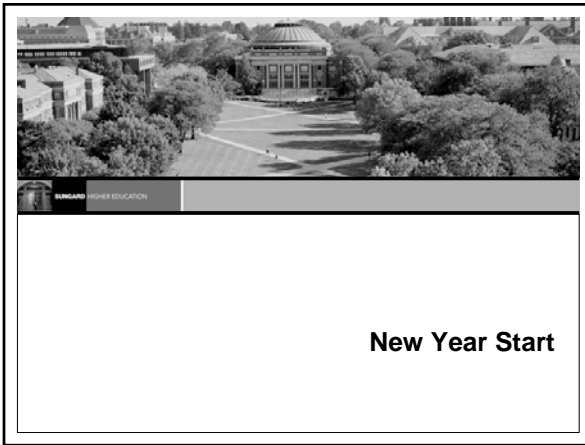
New Year Roll

Objectives
- **To review all of the steps required to roll selected aid year specific information from one aid year to the new aid year, including:**
  —**Creation of a ROAINST instance**
  —**Running the ROPROLL process from Job Submission**
  —**Manually reviewing and editing rules and validation tables FOLLOWING the roll**

Banner Technical Training 7.x

55

New Year Roll

Important Information
- **BEFORE your IT Department can possibly install the appropriate Banner New Aid Year release, you MUST first create an appropriate aid year instance of ROAINST**

New Year Roll

Very Important Considerations:
- **If a row already exists in a table for the aid year to which you roll data, an error message indicates that rows currently exist for the table; only non-existing rows are rolled.**
- **Use caution when copying or manually entering aid year data for a module that you wish to automatically roll from the prior aid year by running ROPROLL.**

New Year Roll

ROPROLL Decisions – What data do you want to roll automatically?

	Parameter	Value
01	From Aid Year Code	ex. 0708
02	To Aid Year Code	ex. 0809
03	Perform roll of Group Rules	Y or N
04	Perform roll of FUND data	Y or N
05	Perform roll of BUDGET data	Y or N
06	Perform roll of TRACKING data	Y or N
07	Perform roll of PACKAGING data	Y or N
08	Perform roll of COMMON data	Y or N
09	Perform roll of EMPLYMENT data	Y or N

Banner Technical Training 7.x

New Year Roll

169

New Year Roll

- **Common functions forms and data**
- **ROAINST**

- RTVTREQ	**- RTVPGRP**
- RTVTRST	**- STVLEVL**
- STVTERM	**- RORDATA**
- RTVAPRD	**- RORTPRD**
- RTVSAPR	**- RTVUSER**
- RTVTGRP	**- RORPOST**
- RTVBGRP	**- RCRINFR**

170

New Year Roll

- **Record creation module**
  - —ROAINST – Set up Institution Financial Aid Options
  - —RCRINFR - Create Data Source Matching Rules
  - —RTVINFC - Update Data Source Code
  - —RCRTPTR – Review for accuracy
  - —RPROPTS – Review Packaging and Disbursement options

171

Banner Technical Training 7.x

New Year Roll

- **Need Analysis module**
  — **RPROPTS – Check Packaging Fields for New Aid Year**
  — **ROAINST – Check for completion of previous year Institutional Parameters**
  — **RORTPRD – Update with previous year's Aid Periods and Terms**
  — **RFRBASE – Review and Update Funds for previous year**
  — **RFRMGMT – Review Funds Management Forms for previous year**
  — **RPRCLSS – Review STVLEVL, STVCLAS and Banner Financial Aid Codes**

New Year Roll

- **Tracking validation tables and rules**
  — **ROAINST – Review next year Tracking Parameters**
  — **RTVTGRP – Review Tracking Group Validation Form**
  — **RTVTREQ – Review and Edit Requirements Tracking Validation Form for next year**
  — **RRRGREQ – Update next year Tracking Group/Requirements and Rules**
  — **RORRULE – Create Group Assignment Rules for next year Using the Copy Function**
  — **RORMESG – Associate any new messages for next year to Tracking Requirement Codes**

New Year Roll

- **Budgeting validation tables and rules**
  — **ROAINST – Create next year Budget Defaults**
  — **RTVAPRD – Confirm Aid Periods for next year**
  — **RTVBTYP – Confirm next year Budget Types**
  — **RBRCOMP – Update Budgets for next year**
  — **RTVBGRP – Confirm next year Budget Groups**
  — **RBRGTYTP – Confirm next year Budget Types**
  — **RORMESG – Associate Budget Messages created on RTVMESG with Budget Groups**
  — **RORRULE – Create next year Budget Group Assignment Rules**

Banner Technical Training 7.x

New Year Roll

- **Funds Management validation tables and rules**
  - ROAINST –Set Pell Fund code Defaults
  - RFRBASE – Update FUNDS for the next Aid Year
  - RFRMGMT – Build next Aid-year Specific Data and Rules for Each Fund You Intend to Use (Initial Page of RFRMGMT Form does NOT roll)
  - RFRDEFA – Create Term Award and Disbursement Schedules for next year by Aid Period
  - RFRASCH – Create OPTIONAL Fund/Term Award and Disbursement Schedules for the next year Aid Year
  - RORRULE – Create OPTIONAL Fund Awarding Rules for next year by Fund Code

New Year Roll

- **Packaging and disbursement**
  - ROAINST – Confirm that Full-Time, Half-Time, ¾-Time Values are associated with EACH STVTERM Code and EACH STVLEVL code for next year (pg. 4)
  - RPROPTS – Create next year Packaging and Disbursement Options
  - RTVPGRP – Confirm next year Packaging Groups
  - RPRGFND – Associate next year Packaging Groups with Funds, indicating the Priority Order and Respective Minimum and Maximum Awards
  - RPRCLSS – Create Class Code Translations for Disbursements
  - RORRULE – Create Packaging Group Assignment Rules for next year if using Automated Packaging

New Year Roll

- Packaging and Disbursement (cont.)
  - RPRDEFR – OPTIONAL Set-up for Institutions Using Self-Help, Gap or Equity Packaging
  - RPRPCKR – Create Self-Help, Gap or Equity Packaging Rules if pertinent to Packaging Philosophy
  - RPRAUDT – Create OPTIONAL rules for Audit Grading Mode if using Adjusted Enrollment Hrs.
  - RORRULE – Create next year OPTIONAL Group/Fund Awarding Rules
  - RPREXPT / RPRCONT – Create OPTIONAL Exemption Interface Rules and/or Contract Interface Rules
  - RPRFSRC – Create OPTIONAL Fund Source Maximum Rules for next year
  - RPRLNDA - If Hold/Release processing is to be utilized

Banner Technical Training 7.x

New Year Roll

- Algorithmic Packaging
  - RFPFBRL – Roll process for fund balances from one aid year to the next

---

New Year Roll

- Loan module
  - ROAINST – Update next year Institutional Loan Parameters
  - RPRLOPT – Create next year Packaging and Disbursement Options for Each Loan Fund
  - RPRLPRD – Create next year Loan Periods
  - RFRMGMT – Verify that the Loan Process Indicator is Checked for Each Loan Fund to be Awarded in next year
  - RPRLNDR – Review Lender Information and Update for next year

---

New Year Roll

- EDE module
  - ROAINST – Update EDE Corrections Indicator form, and Complete Pell, COD and Common line Windows for next year
  - RORDATA – Verify Presence This SGHE-Delivered Table. Modifications to RORDATA Are NOT Recommended

New Year Roll

SUMMARY – Three Steps to Roll Aid Year Data
- **Create an instance of ROAINST prior to installation of new year release**
- **Run the ROPROLL process from Job Submission**
- **If desired, run the roll process for fund balances, RFPFBRL**
- **Review/Edit each of the Financial Aid modules listed in the New Year Start-up Checklist**

Security in Financial Aid
- **In general, no forms should be required that are not already included in Financial Aid security, such as student accounts, admissions status, or others**

SUNGARD HIGHER EDUCATION

Job Submission

Job Submission

- **Defines the parameters in which any given process is to execute**
- **Communicates with the database server environment to schedule the process**
- **Communicates with the database server environment to print the output of the process**

Using Job Submission

- **Start Job Submission**
- **Establish printers**
- **Define processes**
- **Define process parameters**
- **Submit job**
- **Review results**

Start Job Submission--Sleep/Wake

- **Job Submission Process (GURJOBS) must be running in Sleep/Wake mode prior to Job Submission**
  - —**User ID *BANJOBS* should start this process**
  - —***BANJOBS* owns all output from Job Submission**
  - —**Multiple sessions of GURJOBS should be running.**
    - **Rule of thumb**
    - **Two sessions plus one per pair of FA users that will be processing students and running jobs from forms such as ROAIMMP and the automatic running of RPEPELL.**

Banner Technical Training 7.x

Establish Printers

- **Printer Validation table (GTVPRNT)**
  - —Defines the printers to which users can print
  - —Printers must be accessible from the network
  - —The database server must know about the printer and the print queue

---

Define Processes

- **Process Maintenance Form (GJAJOBS)**
  - —Allows for maintenance of overall process attributes
    - • Process name
    - • Process description
    - • Process type (Pro*C, Pro*COBOL, etc.)

Define Process Parameters

- **Parameters for any given process can be maintained dynamically through Banner forms**
  - —GJAPDEF - Parameter Definitions Form
  - —GJAPVAL - Parameter Value Validations Form
  - —GJAPDFT - Default Parameter Value Validations Form

Banner Technical Training 7.x

63

Submit Job

- **Process Submission Control Form (GJAPCTL)**
  —**Creates a one-up number to uniquely identify the job**
  —**Passes the user-entered parameters and the one-up number to the GJBPRUN table**
  —**At run time, all processes access GJBPRUN for their parameters**

Review Results

- **Process Results Form (GJARSLT)**
  —**Allows for the review of the process log**
- **Output files**
  —**All process output (.lis files) reside in the jobsub home directory**
  —**Log files (.log) also reside in the jobsub home directory**

Job Submission

Before
  — Process Maintenance Form (GJAJOBS)
      • Define and maintains jobs
  — Parameter Definitions Form (GJAPDEF)
      • Names and defines parameters
  — Default Parameter Value Validations Form (GJAPDFT)
      • Define default parameters
  — Parameter Value Validations Form (GJAPVAL)

After
  — Process Submission Controls Form (GJAPCTL)
      • Enter parameters and run job
 — Process Results Form (GJARSLT)

Banner Technical Training 7.x

64

JOBSUB

- *BANJOB* is a System user ID, not an Oracle user ID
- *BANJOB* starts Job Submission table (GURJOBS) for each database
- All reports (.lis files) reside in *BANJOB's* directory
- User output may be re-directed with the use of GJAUPRF and directories being defined.

Job Submission – Functional Level
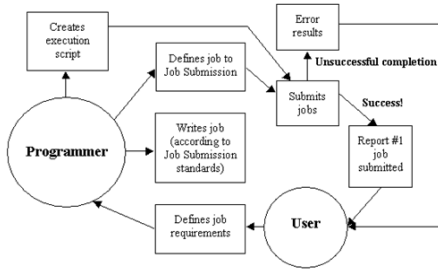
Job Submission – Database Level

Banner Technical Training 7.x
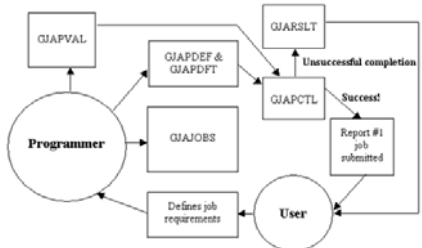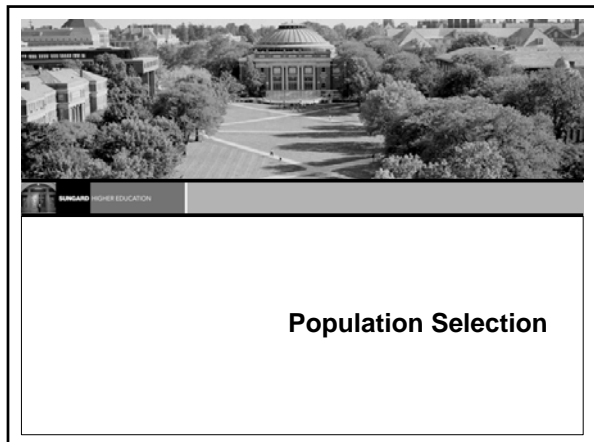
Population Selection

Population Selection

- **Extracts a subset of PIDMs for use in Banner reports and letters**
- **Allows processes to be run using that subset of PIDMs, such as people, vendors, or organizations**
- **Used for reporting purposes or for facilitating Letter Generation**

How does Population Selection Work?

- **Selects the PIDM* for individuals who meet the selection criteria**

SELECT	*Pidm*
FROM	*Table*
WHERE	*Criteria*

  *Primary Identification Master

Banner Technical Training 7.x

Four Basic Steps

- **Identify an application**
- **Define the Population Selection criteria**
- **Extract the IDs that match the criteria**
- **Review the Population Selection**

Step 1: Identify An Application

- **An application owns a grouping of Population Selections**
  - **The rules established by the parent application will be inherited by the child objects**
  - **Examples: FINAID, GENERAL, RECRUITING, ADVANCEMENT**
- **Although the application must be defined in the Application Rules table (GLRAPPL), the rules (criteria) at this level are optional**

Step 2: Define Population Selection Criteria

- **Example: test_female**

```
SELECT spbpers_pidm
  FROM spbpers, spriden
 WHERE spriden_pidm = spbpers_pidm
   AND spriden_change_ind IS NULL
   AND spraddr_stat_code = 'PA'
   AND spbpers_sex = 'F'
   AND spriden_entity_ind = 'P';
```

Banner Technical Training 7.x

67

Define Population Selection Criteria (Cont.)

- **Population Selection Definition Rules table (GLRSLCT)**
  — Allows for entry of the specific criteria which distinguishes one population from another
  — If the tables are joined by PIDM, the PIDM join is automatic
  — If the tables are joined by additional columns, the conditions must be explicitly defined
- **As the form is exited, the process Parameter Selection Process (GLBPARM) compiles the select statement**

Step 3: Extract the IDs

- **Run the Population Selection Extract Process (GLBDATA) from Job Submission**
  — Execute GLBDATA from the Job Submission Form (GJAPCTL)
  — Or enter GLBDATA in Direct Access

Extract the IDs (Cont.)

- **Population Selection Extract Process (GLBDATA) parameters**
  — Selection Identifier 1: Required/Capital Letters
  — Selection Identifier 2:*
  — New Selection Identifier*
  — Enter description of Selection*
  — Enter (U)nion, (I)ntersect, (M)inus*
  — Application : Required/Capital Letters
  — Creator ID : Required/Capital Letters
  — Detailed Execution Report

  * Used only for Union, Intersect, or Minus functionality

Banner Technical Training 7.x

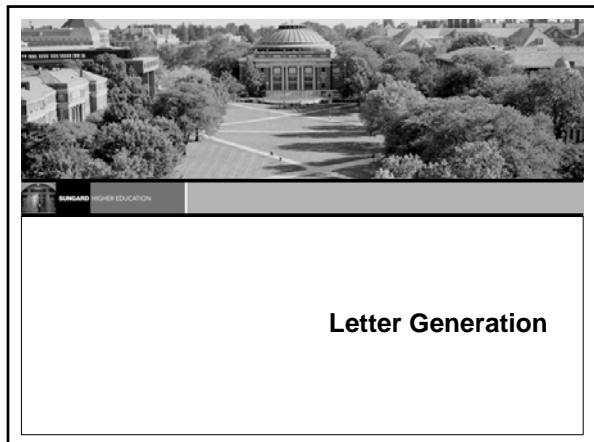**Step 4: Review Population Selection**

- **Population Selection Extract Data Form (GLAEXTR)**
  — Review the results of running Population Selection Extract
    Process (GLBDATA)
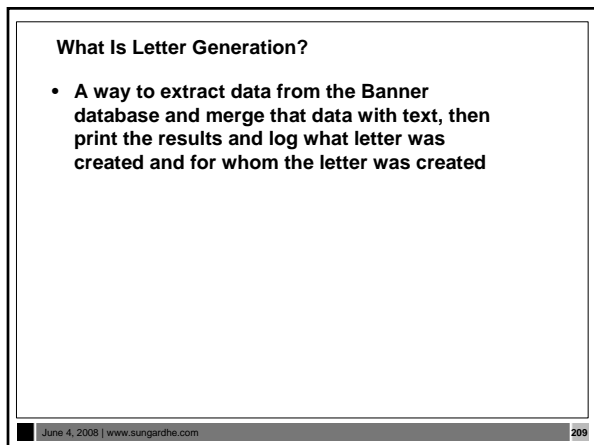 — Add other IDs not processed by GLBDATA
  — Remove IDs processed by GLBDATA

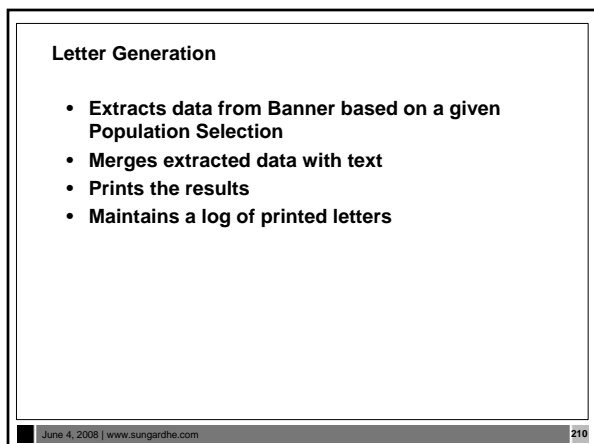---

Population Selection

- **Application definition**
  — GLIAPPL
  — GLRAPPL
- **Objects**
  — GLIOBJT
  — GLROBJT
- **Variable usage**
- **Variable definitions**
  — GLRVRBL -

- **Population Selection rules**
  — GLRSLCT
- **Manual population creation**
  — GLAEXTR
- **View population**
  — GLIEXTR

Population Selection Exercise 5.2.1

- **Write a Population Selection to extract students who
  have an EFC between 100 and 200. Extract the students
  and then run a report (one that's in baseline Banner) to
  print to the database the extracted student's full name
  and ID.**

Letter Generation

What Is Letter Generation?

- **A way to extract data from the Banner database and merge that data with text, then print the results and log what letter was created and for whom the letter was created**

Letter Generation

- **Extracts data from Banner based on a given Population Selection**
- **Merges extracted data with text**
- **Prints the results**
- **Maintains a log of printed letters**

Banner Technical Training 7.x

How does Letter Generation work?

- **It extracts specific data**

```
SELECT   spriden_first_name,
         spriden_last_name
  FROM   spriden
```

- **Only from those PIDMs extracted during a Population Selection**

```
WHERE pop_sel criteria
```

211

How does Letter Generation work? (Cont.)

- **It then merges the extracted data with paragraphs customized for your implementation**

212

Example letter

April 20, 2008

John Doe
123 Street
Malvern, PA 19355

Dear John,

The University is in the process of verifying student information in order to prepare for registration using Self-Service Banner. Please verify that the following information is current and correct:

ID: 123456789
Birth date: 01/01/88

If the information is incorrect, notify our office immediately. Thank you for your assistance.

Sincerely,

Heading

New Paragraph

213

Banner Technical Training 7.x

Steps to create a letter

- **Define variables to be used**
- **Construct paragraphs**
- **Combine paragraphs into letters**
- **Extract population**
- **Extract letter variables**
- **Print letter or create merge file**

Step 1: Define variables
1st Paragraph

April 20, 2000	*DATE1
John Doe	*FUNC_PERSON_NAME
123 Street	*FUNC_PERSON_ADDRESS_LINE1 (LINE2, LINE3)
Malvern, PA 19355	*FUNC_PERSON_CITY_STATE_ZIP
Dear John,	*FUNC_PERSON_SALUTATION

- **Variable Rules Definition table (GLRVRBL)**
    —**Builds selection criteria for data element**
    —**Owned by an application**
    —**Must have data associated with an ID**

Step 1: Define variables
2nd Paragraph

The University is in the process of verifying student information in order to prepare for registration using Banner WEB. Please verify that the following information is current and correct:

ID: 123456789	*ID
Birth date: 01/01/80	*BIRTH_DATE

If the information is incorrect, notify our office immediately. Thank you for your assistance.

Sincerely,

- **As the form is exited, the Parameter Selection Process (GLBPARM) compiles the select statement**

Banner Technical Training 7.x

72

Step 2: Construct paragraphs

- **Paragraph Code Validation Form (GTVPARA)**
  — **Define codes and descriptions for paragraphs**
- **Letter Generation Paragraph Form (GUAPARA)**
  — **Define the contents of each paragraph**
  — **Paragraphs contain variables, formatting commands, and text**
  — **Paragraphs for merge files contain only variables**

Step 3: Combine paragraphs

- **Letter Code Validation Form (GTVLETR)**
  — **Define codes and descriptions for letters**
- **Letter Process Form (GUALETR)**
  — **Combine paragraphs into a letter**

Example Letter - 1st Paragraph

```
*DATE1
#nl
*FUNC_PERSON_NAME
#nl
*FUNC_PERSON_ADDRESS_LINE1 (LINE2, LINE3)
#nl
*FUNC_PERSON_CITY_STATE_ZIP
#nl
#nl
Dear
*FUNC_PERSON_SALUTATION
```

Banner Technical Training 7.x

73

Example letter - 2nd Paragraph

```
#nl
The University is in the process of verifying student information in
#nl
order to prepare for registration using Banner WEB.  Please verify
#nl
that the following information is current and correct:
#nl
#nl
ID:
#nl
*ID
#nl
Birth date:
#nl
*BIRTH_DATE
#nl
If the information is incorrect, notify our office immediately.  Thank
#nl
you for your assistance.
#nl
#nl
Sincerely,
```

Example letter - Merge file

```
*DATE1
*FUNC_PERSON_NAME
*FUNC_PERSON_ADDRESS_LINE1 (LINE2, LINE3)
*FUNC_PERSON_CITY_STATE_ZIP
*FUNC_PERSON_SALUTATION
*ID
*BIRTH_DATE
```

Step 4: Extract population

- **A population must have been extracted prior to the next few steps in Letter Generation**

Banner Technical Training 7.x

74

Step 5: Extract letter variables

- **Run the Letter Selection Process (GLBLSEL) from Job Submission**
  — **Execute GLBLSEL from the Process Submission Control Form (GJAPCTL)**
  — **Or enter GLBLSEL in Direct Access**
- **Extracts data from the database for selected PIDMs and stores it in a collector table**

Step 6: Print the letter

- **Submit the Letter Generation Print Report (GLRLETR) through the Process Submission Control Form (GJAPCTL)**
  — **Removes the selected variables from the Collector table**
  — **Merges that data with text specified in a letter**
  — **Prints the letter or creates the appropriate word processing file**

Creating a letter

- **Application Definition Rules Form (GLRAPPL)**
  (Create an application. Only once.)

- **Object Definition Rules Form (GLROBJT)**
  (Created once per object.)

- **Letter Code Validation Form (GTVLETR)**
  (Needed for every letter.)

- **Variable Definition Rules Form (GLRVRBL)**
  (Every variable has to be created only once.)*

- **Paragraph Code Validation Form (GTVPARA)**
  (Needed for every paragraph.)*

- **Letter Generation Paragraph Form (GUAPARA)**
  (Details needed for each paragraph.)

            *May be used for multiple letters in the same module

Banner Technical Training 7.x

Tracking Letters

- **Determine how often you will send tracking letters (MIL's) to students and follow the procedure in the workbook when you want to send them**

Conversions

The Big W!

Who?
What?
When?
W? Where?
Why?

Banner Technical Training 7.x

Which way do I go?

Manual
- Slower
- Data entry errors
- Small volume only

Electronic
- Large volumes
- Requires development and testing

Conversion Considerations

- Keeping track of PIDM on Legacy System
- What type of data you are bringing across
- Random ID# or SSN?
- Name/Address formatting
  —No number signs: "#"
  —No periods: "."
- Address types
- Multiple IDs on Legacy System?

Timing Considerations

- **Timing**
  —**New year conversion**
    - Recommended
    - Starts January 1
  —**Mid-year conversion**
    - Not recommended
    - Each table must be populated to suggest Banner Financial Aid was running since the beginning of the aid year

Banner Technical Training 7.x

Conversion Steps

1. Document!!
2. Review and clean current data
3. Determine Scope (What will you convert?)
4. Map current data to Banner
5. Write a detail data plan
6. Review plan and get approval
7. Develop procedures and programs
8. Test
9. Create database
10. Do conversion
11. Verify and correct
12. Test!

*You will need your end users!

Financial Aid System Conversions

- **Persons**
- **Students**
- **Award history**
- **Tracking requirements**

Refer to Chapters 5, 6, and 8 of the *Financial Aid Technical Reference Manual*

General Person Records

- **Identification table (SPRIDEN) - Person ID (required)**
- **Address table (SPRADDR)**
- **Telephone Number table (SPRTELE)**
- **Person table (SPBPERS) - Basic person**
- **Applicant Holds table (SPRHOLD) – Holds**
- **Person email table (GOREMAL)**

Banner Technical Training 7.x

78

General Student Records

- **Student Base table (SGBSTDN) - (Required)**
  - Residency
  - Academic status
  - Educational goal
- **Other student data**
  - Assistantship/Fellowship/Internship
  - Educational opportunity
  - Student disability
  - Veteran status
  - Sports information

Tracking Requirements

- **Financial Aid Institution table (ROBINST)**
  — Create one record for each aid year that you load
  — Enter data manually through the Financial Aid Institution Options Form (ROAINST)
- **Tracking Requirements Status Validation table (RTVTRST)**
  — All tracking requirement status codes must exist before you can load historic records

Tracking Requirements (Cont.)

- **Source/Background Institution Code Validation Form (STVSBGI)**
  — Source background institution codes must exist before you can load historic records with SBGI codes
- **Tracking Requirements Validation table (RTVTREQ)**
  — All tracking requirements codes must exist before you can load historic records
- **Tracking Group Validation table (RTVTGRP)**
  — All tracking group codes must exist before you can load historic records

Banner Technical Training 7.x

Award History and Transcripts

- **Functional Staff (tables)**
  - Financial Aid Institution table (ROBINST)
  - Fund Base Data table (RFRBASE)
  - Satisfactory Academic Progress Validation table (RTVSAPR)
  - Award Status Validation table (RTVAWST) - Award Status codes must exist here
  - Student Term Validation table (STVTERM) - Term codes must exist here before you can load historic records

- **Technical Staff (tables)**
  - Fund Aid Year Specific Data table (RFRASPC) - Packaging and Disbursement uses aid year-specific fund codes. Only required for mid-year conversion
  - Satisfactory Academic Progress Rules table (RORSAPR)
  - Applicant Status Report (RORSTAT)
  - Applicant Award table (RPRAWRD) - Create award records, one per aid year, per PIDM, per fund code.

Conversion

- **Financial Aid Hold**
  - Applicant Status table (RORSTAT)
  - Financial Aid Holds table (RORHOLD): Financial Aid holds are linked to the student by PIDM, by aid year and by hold code
  - Hold Type Validation Form (RTVHOLD) : Financial Aid hold codes must exist here before you can load historic records

- **Applicant Comments**
  - Applicant Status table (RORSTAT)
  - Financial Aid Institution table (ROBINST): Financial Aid Institution Options Form (ROAINST)
  - Applicants Comments (RHRCOMM) : Applicant comments are created by PIDM by user ID. Comments also require sequence number

---

Testing

- **Use Banner forms to view inserted data**
- **Navigate through several forms**
- **User testing**

Database Requirements

- **A clean instance must have at least:**

  (Review FAQ #7878)
  - RFRFFID   -   Federal Fund ID table
  - RORDATA -   Data Dictionary table
  - RORDSUP -   Supplemental Log Data table
  - RORDVAL -   Audit Log Form Data Code table
  - RORPELL -   PELL Grant Payment Schedule table
 - RPRFEDR -   Federal Rules table

---

Database Requirements (Cont.)

- RTVINFC - Application Tape ID Validation table
  - (Code, Desc and Activity Date, only)
  - All other columns should be null
- RTVRJCT - Reject Validation table
- RTVPTYP - Batch Posting Type Validation table
- RTVDLBT - Batch Type Validation table
- RTVPRCD - Program Code Validation table
- RTVYICD - Year in College Description table
- RTVCDNT – COD Nation Code Rules table
- RTVCDST – COD State Code Rules table

Migration to Production

- **Review spreadsheet of tables to export/import in the workbook**
  - Non-supported data -> client needs to review their database and Banner installation

Banner Technical Training 7.x

81
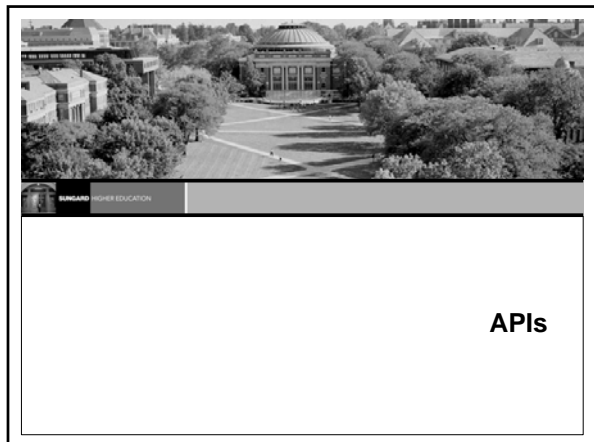
APIs

APIs

- **Application Programming Interfaces (APIs) enhance processing and simplify code**
- **The API is actually a program comprised of four different packages:**
  — **a primary package containing query functions and create, update, and delete procedures**
  — **a Rules package containing subprograms that support the primary package**
  — **a Strings package containing error messages**
  — **an associated DML package that performs the actual database maintenance of the edited data**

APIs (cont.)

- **In addition to the API packages, there are three supporting package types**
  — *Utility* - **Provides utility functions and procedures for the Banner APIs**
  — *Validation* - **Contains standard functions and procedures for a specific validation table**
  — *Support* - **Contains supporting programs that may be called by other APIs and error messages related to these edits**

Banner Technical Training 7.x

APIs (cont.)

- The APIs are called by programs within Banner (for example, forms, C processes, self-service packages)
- APIs may be called by external systems that need to create, update, or delete information stored in Banner tables
- Various institutions requested that SunGard support school-specific validation logic with the APIs
  — The Banner APIs include connection points that you can use to interface with your own code to enable your validation logic without having to change baseline code
- For additional information, refer to the API Technical Documentation available on the Customer Support Center

---

APIs used in Banner Financial Aid

- The most valuable APIs for third party use are the business process APIs: RP_AWARD, RP_AWARD_SCHEDULE and RP_REQUIREMENT
  —These APIs handle everything necessary for adding and maintaining awards, award schedules and requirements and are used behind the RPAAWRD and RRAAREQ forms

- Refer to tables in the workbook

Course Summary

Banner Technical Training 7.x

Course Summary

- **You should know:**
  - How to navigate in Banner
  - Banner naming conventions for tables, forms, and processes
  - The structure of directories and their contents
  - How Job Submission, Population Selection, and Letter Generation work
  - Where to get needed data. Check researching directories, documentation, or consultants

---

Additional Resources

- **Other Technical training sessions**
- **Functional training sessions**
- **Documentation**
- **Discussion lists**
- **Professional Services staff**

Questions?

- *Please complete your class evaluation form.*

Banner Technical Training 7.x

Thank you for your participation