Banner Student
Population Selection Training Workbook

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SUNGARD HIGHER EDUCATION

What can we help you achieve?

Revision History Log

Publication Date	Summary
Publication Date	Summary
April 2008	New version that supports 8.0 software.

Think before you print.

Table of Contents

Introduction

Course goal

This course is intended to teach you to identify key forms, tables, and reports in which to query distinct populations within the Banner System. In addition, you will learn to follow key processes and query tables. The workbook is divided into these sections:

- Introduction

- Set Up

- Day-to-day operations

Course objectives

In this course you will learn how to

- define a simple application with no application-level rules

- define an application with application-level rules

- define simple Population Selection rules

- copy Population Selection rules

- select a population

- view Population Selection results

- perform a query on a selected population

- add/delete people to a selected population

- delete the results of a population

- create a Manual Population Selection

- create Population Selection rules using objects

- create Population Selection rules using a sub query variable

- identify a distinct group of individuals for data extraction

- select a distinct group of students

- extract your selection

- identify the processes in which to use your selection.

Intended audience

Staff interested in selecting distinct populations for use in running reports and the Letter Generation process

Prerequisites

To complete this course, you should have

- completed the Education Practices computer-based training (CBT) tutorial *Banner 8 Fundamentals*, or have equivalent experience navigating in the Banner system

- administrative rights to create and perform the necessary set up in Banner

Process Introduction

Introduction

Banner Population Selection is a mechanism for selecting a group of people or organizations, which share common data, based on specific criteria. For example, because Banner stores a person's gender and address, a user can select all of the people in the database who are male and have an address in New York State. Because Banner stores a great deal of information, it makes it possible to select groups using simple and complex criteria.

Flow diagram

This diagram highlights where Population Selection occurs within the overall Student process.

About the process

The process involves these steps.

- Identify the population you wish to select.

- Identify the table and field names within Banner you wish to select in order to create the rules associated with a specific population.

- Create validation and rules forms based on the tables and field names identified for the population selected.

- Run the process.

- Review the output.

Note: Rule and validation forms are set up on the Banner System. Unless code is required, this step is performed only once.

Storing Information in Banner

How information is stored

To understand Population Selection, it is helpful to understand how Banner stores information. The Oracle database (which is the basis of Banner) is made up of tables and rows much like a spreadsheet. For example, view the table below.

Last Name	First Name	Middle Name	ID
White	John	Hunter	555112222
Smith	Mary	Therese	003525454
Williams	Tom	Mitchell	952854785

Note: All of the last names are stored in the first column, and all of the information about John Hunter White is stored in one row, or record.

Role of the PIDM

To store the vast amount of data used by Banner clients, the system has thousands of tables. For example, the table SPRIDEN stores name and ID information (e.g. last name, first name, prefix, suffix, etc); the table SPRADDR stores address information, and the table SPBPERS stores personal information (e.g., sex, birth date, and ethnicity).

To ensure that the information on a specific record in one table is connected to the correct record in another table, Banner uses a field, called PIDM, which has the same value for a record in every table. Every time a new person or non-person is added to the system, Banner generates a unique PIDM. This number is used for every record in every table that pertains to the person created.

Example 1

Look at that table again, but this time with the PIDM column added:

PIDM	Last Name	First Name	Middle Name	ID
0000001	White	John	Hunter	555112222
0000002	Smith	Mary	Therese	003525454
0000003	Williams	Tom	Mitchell	952854785

Example 2

Now let's look at another table, the address table:

PIDM	Street	City	State	ZIP
0000001	1 Main Street	Henniker	NH	03242
0000002	2 Elm Street	Dearborn	MI	51245
0000003	3 Beech Street	New Durham	NH	03454

To display name and address information for Mary Smith, Banner can connect the two records using the PIDM. Thus, Mary Smith lives at 2 Elm Street, Dearborn, MI 51245.

Note: Every table in Banner that contains information about a person or non-person uses the PIDM to identify the record.

Selecting Records in Banner Using SQL

What is SQL?

Banner uses a SQL (Structured Query Language) to ask for information from the database. A SQL statement is composed of three parts

- select clause

- from clause

- condition or where clause.

For example, to get the last names of everyone living in New Hampshire, a user would ask

- the LAST NAME

- from the NAMES and IDS table and the ADDRESSES table

- where the STATE is New Hampshire.

Or, in SQL

```
select LAST NAME
  from NAMES & IDS, ADDRESSES
 where STATE = 'NH'.
```

Note: Both tables are mentioned in the **From** clause because one is for selecting from and the other uses the conditions. You would surround the letters NH in single quotes, this tells Banner that it should look for the literal value NH in that field.

Note: SQL is literal and case sensitive.

Query results

The result of our query would be

- White

- Williams.

Of course, Banner tables can be more complex, with complicated names.

Note: Banner field names have no spaces (use underlines to connect words), and they always begin with the table name.

Example: SPRIDEN_ID and SPRADDR_STAT_CODE

If this were a real Banner query, it would use the field and tables names from Banner. The result would look like this:

```
 select spriden_last_name
   from spriden, spraddr
  where spraddr_stat_code = 'NH'
```

Note: Finding table and field names in Banner are found by selecting the field that you want to pull information from and selecting Dynamic Help Query or by putting your cursor in the field and holding the shift key down and double clicking. The base table name is contained in the Block: entry and the field name is contained in the Field: entry.

Using Conditions in SQL

Multiple conditions

Some statements may require more than one condition. For example, you may get a request for "the last names of all the males from Massachusetts." The statement would look like this:

```
where spbpers_sex  = 'M' and
spraddr_stat_code = 'MA'
```

Clauses joined by *and* mean that the record must meet *all* the conditions. Another option is *or*. A request for "the last names of everyone from Massachusetts *or* Connecticut would read:

```
where spraddr_stat_code = 'MA' or
spraddr_stat_code = 'CT'
```

Now the record only has to meet either condition, not both.

Using *and* and *or*

By combining *and* and *or*, the data can be manipulated, but the user must be careful. Consider the request for "last names of all males from Massachusetts or Connecticut." It might *incorrectly* be assumed that the statement would be written:

```
select spriden_last_name
from spriden, spraddr, spbpers
where spbpers_sex = 'M' and
spraddr_stat_code = 'MA' or
spraddr_stat_code = 'CT'
```

Unfortunately, the results are wrong because Banner interpreted the request as "the last names of all males from Massachusetts *or everybody* in Connecticut! In other words, Banner combined the first two lines of the where clause and kept the third line as a separate condition.

Banner can be told to combine portions of a where clause by using parenthesis:

```
select spriden_last_name
from spriden, spraddr, spbpers
where spbpers_sex = 'M' and
(spraddr_stat_code  = 'MA' or
spraddr_stat_code = 'CT')
```

Using operators

Often, the information wanted requires more flexibility than simply saying that a value equals some other value. You may want to identify individuals, whose state *equals* PA and their ACT composite score is greater than 25 or their zip code is between 19131 and 19355.

Banner provides many of these operators, including

- equals

- not equals

- in

- not in

- like

- not like

- between

- is null

- is not null.

For example, the statement above could be written like this:

```
select spriden_last_name
from spriden, spraddr,, sortest
where   spraddr_stat_code = 'PA' and sortest_tesc_code = 'A05' and
(sortest_test_score > 25 or spraddr_zip between '19131' and '19355')
```

In this case, the last line provides a list for Banner to choose from.

Note: The word null has a special meaning in SQL. It means the field has nothing in it. That is different from having 0 in it. Zero is a value.

What is selected?

The Population Selection process only selects IDs (actually PIDMs); you cannot use it for selecting benefits, employee classes, payroll, or any other information. Only PIDMs can be selected and only persons or non-persons have PIDMs.

Set Up

Section goal

The goal of this section is to outline the set-up process and detail the procedures to set-up your Banner system to handle Population Selection at your institution.

Objectives

This course is intended to teach you to identify and group entities in the database (for example, people, vendors, and organizations). You will define selection criteria to identify and extract a subset of these entities to use in Banner reports, processes, and letters.

In this section you will learn how to

- define a simple application with no application-level rules

- define an application with application-level rules

- define simple Population Selection rules

- copy Population Selection rules

- select a population

- view Population Selection results

- perform a query on a selected population

- add/delete people to a selected population

- delete the results of a population

- create a Manual Population Selection

- create Population Selection rules using objects

- create Population Selection rules using a sub query variable.

Before You Begin

Introduction

Before Banner can process general population selection you need to

- identify the population you wish to select

- identify the field names being used in the population selection

- set or create specific forms and rules in which to select the population.

Defining an Application with No Rules

Introduction

The Application Definition Rules Form (GLRAPPL) is used to define an application.

An application is a functional area with similar characteristics that can be applied to Population Selections and variables.

Banner form

Steps

Follow these steps to begin defining and testing Population Selection rules.

Note: You want to define an application for your personal testing use. You must first determine whether an application exists with the code you wish to assign to your application. If it already exists, use that application; if not then you can create your application.

1. Access the Application Definition Rules Form (GLRAPPL).

2. Click the **Search** icon next to the **Application** field to view the List of Values.

3. Review the list of applications already defined.

4. Click **Cancel** to return to GLRAPPL.

5. Enter an application code using your last and first initials followed by the characters *APPL* in the **Application** field.

    Example: Mary Smith would enter *SM_APPL.*

    Note: Each participant must create a unique code.

6. Perform a **Next Block** function.

7. Enter a description for your application in the **Description** field.
    Example: Mary Smith's Application*.*

8. Double-click in the **System** field and select an appropriate value.

    Example: S *Student*

    Notes: The **System** field identifies the Banner System associated with the application. This indicator updates information displayed on the Mail Query Form (GUIMAIL) when letters are printed.

    Leave the application-level rules block empty.

9. Click the **Save** icon.

10. Click the **Exit** icon.

Steps

Follow these steps to review the application you just created.

1. Access the Application Inquiry Form (GLIAPPL).

2. Review the applications to find the one you just created.

3. Click the **Exit** icon.

Defining an Application with Application–Level Rules

Introduction

As mentioned in the previous lesson, the Application Definition Rules Form (GLRAPPL) is used to define and maintain an application.

An application can optionally include general, high-level rules used to select IDs, (example: Term Code). Any rules in an application are automatically included in all Population Selections controlled by the application. Population Selections within an application have additional, more detailed rules that select specific populations. For example, an application can select undergraduate students. Within the application, various Population Selections might select seniors, resident students, and international students.

Example: The Dean of Women wants to begin using Population Selection and is ready to define an application. In addition to defining the application, the Dean knows that she wants to select women only in her processing. She decides to include the selection of women as a rule in her application.

Banner form

Steps

Follow these steps to define an application.

1. Access the Application Definition Rules Form (GLRAPPL).

2. Click the **Search** icon next to the **Application** field to view the List of Values.

3. Review the list of applications already defined.

4. Click the **Cancel** icon to return to GLRAPPL.

5. Enter an application code using your last and first initial and the characters DW, indicating Dean of Women in the **Application** field.

    Example: Mary Smith would enter *SM_DW*.

    Note: Each participant must create a unique code.

6. Perform a **Next Block** function.

7. Enter a description for your application in the **Description** field.

    Example: Dean of Women Application*.*

8. Double-click in the **System** field and select an appropriate value, for example, *S* (Student).

    Note: The **System** field identifies the Banner System associated with the application. This indicator updates information displayed on the Mail Query Form (GUIMAIL) when letters are printed.

9. Perform a **Next Block** function.

10. Click the **Search** icon in the Rules block to access the Object Inquiry Form (GLIOBJT).

11. Search through the objects listed to find:

    - **Object**   Women

    - **Description**   Select Women

12. Double-click in the **Object** field to return the following information to the Rules block:

- **Data Element**   SPBPERS_SEX

- **Operator**   =

- **Value**   'F'

13. Click the **Save** icon.

14. Click the **Exit** icon.

15. Access the Application Inquiry Form (GLIAPPL).

Note: Note that the new application is displayed.

16. Click the **Exit** icon.

Defining Simple Population Selection Rules

Introduction

The Population Selection Definition Rules Form (GLRSLCT) is used to define, maintain, and copy a Population Selection.

A Population Selection is a set of rules used to select IDs from the Banner database for reports, processes, and letters. For example, you can use a Population Selection to select a group of applicants for an orientation letter. An application, selection ID, and creator ID uniquely identify a Population Selection.

Scenario

The Dean of Women is planning a reception and wants to invite only married women. She wants to use Population Selection to prepare her invitations. The Dean's application already includes the criteria that only women should be selected. In defining her population rule, the Dean needs to specify that each woman be married in addition to the application-level rules.

Banner form

Population Selection Definition Rules GLRSLCT 8.0 (BAN8)

Application:

Selection ID:

Creator ID: SAISUSR

Selection Description

☐ Manual   ☐ Locked   ☐ Delete   ☐ Application Level Rules Exist

Definition

Select:

From:

Rules

'('	Data Element	Operator	Value	')'	AND / OR

Application Code; press LIST for valid values

Record: 1/1 | | ... | List of Valu... | | <OSC>

Steps

Follow these steps to define a population selection rule.

1. Access the Population Selection Definition Rules Form (GLRSLCT).

2. Enter the code for the Dean of Women Application previously defined in the **Application** field.

   Example: Mary Smith would enter *SM_DW.*

3. Enter the code *MARRIED* in the **Selection ID** field*.*

   Note: The user ID used to log into the Banner System is displayed in the **Creator ID** field.

4. Perform a **Next Block** function.

5. Enter a description for your Selection ID in the **Description** field.
   Example: Dean of Women Appl-Married*.*

6. Perform a **Next Block** function.

7. Enter *SPBPERS_PIDM* in the **Select** field.

8. Enter *SPBPERS* in the **From** field.

9. Perform a **Next Block** function.

10. Enter *SPBPERS_MRTL_CODE* in the **Data Element** field.

11. Select = in the **Operator** field*.*

12. Enter '*M'* in the **Value** field.

    Note: If the value is alpha it needs to be surrounded by single quotation marks.

13. Click the **Save** icon.

14. Click the **Exit** icon.

    Note: You will see the message "Performing Population Selection Compilation, please wait". If your Population Selection is compiled successfully, you will exit the form. If it does not compile successfully, you are returned to GLRSLCT and an error message displays.

Steps

Follow these steps to review the selection ID.

1. Access the Population Selection Inquiry Form (GLISLCT).

2. Access the **Selection ID** field.

3. Note that the new selection ID now displays.

4. Click the **Exit** icon.

Copying Population Selection Rules

Introduction

The Population Selection Definition Rules Form (GLRSLCT) also allows the copying of rules in an existing Population Selection and creating a new Population Selection. By changing the application and selection ID, your ID becomes the creator ID. A copied Population Selection can be changed as needed.

Scenario

The Dean of Women is planning another reception. This time she wants to invite only single women. She plans to use Population Selection to prepare her invitations, and she knows that she already has rules defined to select married women. She decides to copy her old rules rather than defining new ones from scratch.

Banner form

Steps

Follow these steps to copy a population selection rule.

1. Access the Population Selection Definition Rules Form (GLRSLCT).

2. Enter the code for the Dean of Women Application previously created in the **Application** field.

   Example: Mary Smith would enter *SM_DW.*

3. Enter the code *MARRIED* for the Population Selection for married persons in the **Selection ID** field.

   Note: The ID used to create the original population selection is displayed in the Creator ID field.

4. Perform a **Next Block** function.

5. Select the Copy option from the **Options** menu.

6. Information in the Copy From block should be populated.

7. Enter the same application code in the **Application** field of the Copy To block.

   Example: SM_DW*.*

8. Enter *Single* in the **Selection ID** field*.*

   Note: The **Creator ID** field self-populates with the ID used to log into the Banner System.

9. Click the **Save** icon.

   Note: After your rules have been copied, you are returned to the Population Selection Definition Form.

10. Enter a new description for your copied Selection ID in the **Description** field.

    Example: Dean of Women Appl–Single.

11. Perform a **Next Block** function twice to navigate to the Rules block.

12. Change the value of the Data Element (SPBPERS_MRTL_CODE) so that it is equal to *S* instead of *M*.

- **Data Element** SPBPERS_MRTL_CODE

- **Operator** =

- **Value** **'S'**

13. Click the **Save** icon.

14. Click the **Exit** icon.

Note: You see the message "Performing Population Selection Compilation, please wait." If your Population Selection is compiled successfully, you exit the form. If it does not compile successfully, you are returned to GLRSLCT and an error message displays.

Steps

Follow these steps to review the new selection ID.

1. Access the Population Selection Inquiry Form (GLISLCT).

2. Note that the new Selection ID now displays.

3. Click the **Exit** icon.

Defining a Manual Population Selection

Introduction

The Population Selection Definition Rules Form (GLRSLCT) is used to define, maintain, and copy a Population Selection.

A Population Selection is a set of rules used to select IDs from the Banner database for reports, processes, and letters. For example, you can use a Population Selection to select a group of applicants for an orientation letter. An application, selection ID, and creator ID uniquely identify a Population Selection. A manual Population Selection may be created and used to run a report or for the Letter Generation process.

Scenario

The Dean of Women is planning a private reception and wants to invite those students who volunteered throughout the year (this information is not tracked in the system). She wants to use Population Selection to prepare her invitations. The Dean knows the individuals she wants to send an invitation.

Banner form

Steps

Follow these steps to define a manual Population Selection.

1. Access the Population Selection Definition Rules Form (GLRSLCT).

2. Enter the code for the Dean of Women Application previously defined in the **Application** field.

   Example: Mary Smith would enter *SM_DW.*

3. Enter the code *PRIV_EVENT* in the **Selection ID** field*.*

   Note: The user ID used to log into the Banner System is displayed in the **Creator ID** field.

4. Perform a **Next Block** function.

5. Enter a description for your Selection ID (something that specifically describes your Selection ID) in the **Description** field.

   Example: Private Reception Volunteers

6. Click the **Manual** checkbox.

7. Click the **Save** icon.

8. Click the **Exit** icon.

   Note: You will see the message "Performing Population Selection Compilation, please wait". If your Population Selection is compiled successfully, you exit the form. If it does not compile successfully, you are returned to GLRSLCT and an error message displays.

9. Access the Population Selection Extract Data Form (GLAEXTR).

10. Double-click in the **Application** field and select your application.

    Example: SM_DW*.*

11. Enter *PRIV_EVENT* in the **Selection ID** field.

   Note: By clicking the **Search** icon next to the **Selection ID** field, you can search for your application.

   Note: The **Creator ID** and **User ID** fields will auto populate.

12. Click the **Insert Record** icon.

13. Click the **Search** icon.

14. Select Person Search from the list.

15. Enter *B%* to search for all persons whose last name begins with B in the **Last Name** field.

16. Perform an **Execute Query** function.

17. Double-click on the appropriate ID to return it to the Population Selection Extract Data Form.

18. Continue this process until all individuals selected to attend have been entered.

19. Click the **Save** icon.

   Note: Notice that the **System/Manual** indicator for the person you have added is M(anual), and for the others, it is S(ystem). You are now ready to run this Population Selection with your invitation.

20. Click the **Exit** icon.

Viewing Defined Objects

Introduction

The Object Definition Rules Form (GLROBJT) is used to define and maintain an object. An object is a set of common rules used in many different population selections and variables.

Objects are not required, but they simplify data entry and provide some consistency. Once you define a set of rules as an object, you can reference the object rather than manually entering the rules each time they are needed. For example, many variables and Population Selections use the current record for names and IDs.

You can create an object with the rule `SPRIDEN_CHANGE_IND IS NULL` and insert this object whenever it is needed.

Objects are not directly associated with an application. They can be referenced in any variable or Population Selection in any application. The selection rules that are contained within an object contain the same components as the selection rules used to define an application.

Scenario

The Dean of Men wants to select all men who are divorced. He has not worked much with Population Selection but knows that objects exist that define *Men* who are *Divorced*. He decides to try it.

Banner form

Object Definition Rules GLROBJT 8.0 (BAN8)

Object: [   ] [▼]

Description: [   ]

Rules

'('	Data Element [▼]	Operator	Value	')'	AND / OR
[▼]	[ ]	[ ] [▼]	[ ]	[▼]	[▼]
[▼]	[ ]	[ ] [▼]	[ ]	[▼]	[▼]
[▼]	[ ]	[ ] [▼]	[ ]	[▼]	[▼]
[▼]	[ ]	[ ] [▼]	[ ]	[▼]	[▼]
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[▼]	[ ]	[ ] [▼]	[ ]	[▼]	[▼]
[▼]	[ ]	[ ] [▼]	[ ]	[▼]	[▼]
[▼]	[ ]	[ ] [▼]	[ ]	[▼]	[▼]

Object name; press LIST for valid names
Record: 1/1 | | ... | | | <OSC>

Steps

Follow these steps to define an object.

1. Access the Object Definition Rules Form (GLROBJT).

2. Select *Men* in the **Object** field.

3. Perform a **Next Block** function.

4. Review the definition of the object men.

5. Perform a **Roll Back** function.

6. Select *Divorced* in the **Object** field.

7. Perform a **Next Block** function.

8. Review the definition of the object divorced.

9. Click the **Exit** icon.

Creating Population Selection Rules Using A Sub Query Variable

Introduction

A variable is a specific piece of data in the database and the set of rules used to select that data. Variables are used to insert data into letters and reference sub queries in application rules, population selection rules, and variable selection rules.

Each variable is associated with an application. The parentheses are required for sub queries. The literal *SUB indicates this is a sub query or a reference to another variable.
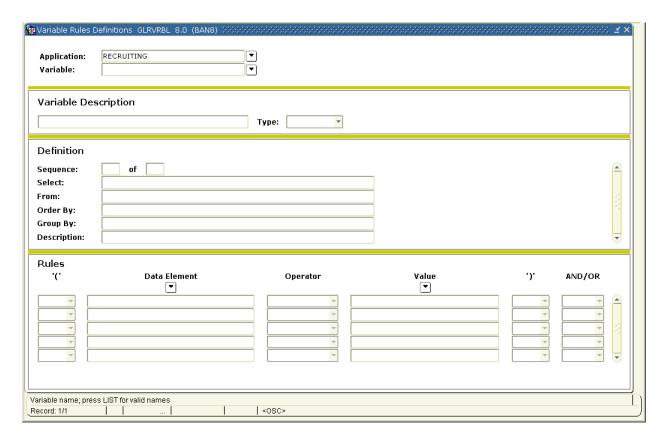
The variable is a valid variable name already defined on the Variable Rules Definition Form (GLRVRBL) and compiled in this application. You can click the **Search** icon to access the Variable Inquiry Form (GLIVRBL) to search for a variable. If you select a variable from the list, the system gives it the proper syntax.

Note: A variable used as a sub query cannot have another sub query defined within it. A variable can have only one sub query. If defined, it must be the last rule.

Scenario

The Dean of Women knows that she needs to use Population Selection often and that most of her rules need to use a sub query to locate the correct effective student record. Today she needs a list of students with active student records for this term.

Banner form

Steps

Follow these steps to use sub query variables.

1. Access the Variable Rules Definition Form (GLRVRBL).

2. Select *WKBOOK* in the **Application** field.

3. Select **SUB_CURR_STU_REC* in the **Variable** field.

    Notes: When using a dynamic parameter in a variable, the field that is being compared with the dynamic parameter should, if possible, be from the table that is used in the Select statement.

    When using a dynamic parameter with an IN or NOT IN operator, do not include left and right parentheses. Parentheses are added at run time when the dynamic parameter is prompted. Do not include spaces when entering the value for the dynamic parameter.

4. Perform a **Next Block** function.

   Note: The rules for this variable are displayed. It is a sub query variable already defined to select the correct effective term student record based on a dynamic parameter for term.

5. Select the Copy from the **Options** menu.

6. Enter *DW_XX* (xx = your initials) for the Dean of Women application previously created.

   Example: Mary Smith would enter *DW_MS*.

7. Enter *SUB_CURR_STU_REC* in the **Copy To Variable** field.

8. Click the **Save** icon.

9. Click the **Exit** icon.

10. Access the Population Selection Definition Rules Form (GLRSLCT).

11. Enter *CURR_STU* in the **Selection ID** field.

12. Perform a **Next Block** function.

13. Enter a name for your selection ID in the **Selection Description** field.

14. Click the **Manual** checkbox.

15. Perform a **Next Block** function.

16. Enter *SGBSTDN_PIDM* in the **Select** field.

17. Enter *SGBSTDN A* (leave a space before the A) in the **From** field.

18. Enter the following two lines (leave a space after the first *SUB) in the Rules block.

    ```
    SGBSTDN_STST_CODE = 'AS'
    SGBSTDN_TERM_CODE_EFF = (*SUB*SUB_CURR_STU_REC)
    ```

    Note: In these rules lines, AS represents the code for Active students and the second line references the sub query variable.

19. Click the **Save** icon.

20. Click the **Exit** icon.

21. Access the Population Selection Extract Process (GLBDATA) and run the process.

22. Access the Population Selection Extract Data Form (GLAEXTR) or Population Selection Extract Inquiry Form (GLIEXTR) to review the output.

Self Check

Directions

Use the information you have learned in this workbook to complete this self-check activity.

Question 1

The System field identifies the Banner System associated with the application. This indicator updates information displayed on which form when letters are printed?

Question 2

Which form would you access to find out if you entered your application correctly?

Question 3

If your Population Selection does not compile successfully, you will receive an error message and be returned to which form?

Question 4

If you copy a Population Selection that was created by someone else, whose creator ID will be attached to that selection?

Question 5

Population Selection uses what to insert data into letters and reference sub queries in application rules, population selections rules, and variable selection rules?

Answer Key for Self Check

Question 1

The System field identifies the Banner System associated with the application. This indicator updates information displayed on which form when letters are printed?

Mail Query Form (GUIMAIL)

Question 2

Which form would you access to find out if you entered your application correctly?

Application Inquiry Form (GLIAPPL)

Question 3

If your Population Selection does not compile successfully, you will receive an error message and be returned to which form?

Population Selection Definition Rules Form (GLRSLCT).

Question 4

If you copy a Population Selection that was created by someone else, whose creator ID will be attached to that selection?

The ID of the person copying the population selection will become the creator ID.

Question 5

Population Selection uses what to insert data into letters and reference sub queries in application rules, population selections rules, and variable selection rules?

Variables are used to insert data into letters and reference sub queries in application rules, population selections rules, and variable selection rules.

Day-to-Day Operations

Section goal

The goal of this section is to explain the day-to-day or operational procedures to select distinct groups of individuals in order to use for reports or the Letter Generation process at your institution.

Objectives

In this lesson you will learn how to

- identify a distinct group of individuals for data extraction

- select a distinct group of students

- extract your selection

- identify the processes in which to use your selection.

Running a Population Selection

Introduction

The Population Selection Extract Process (GLBDATA) is used to extract IDs (people and non-persons) from the Banner database based on the rules entered on the Population Selection Definition Rules Form (GLRSLCT).
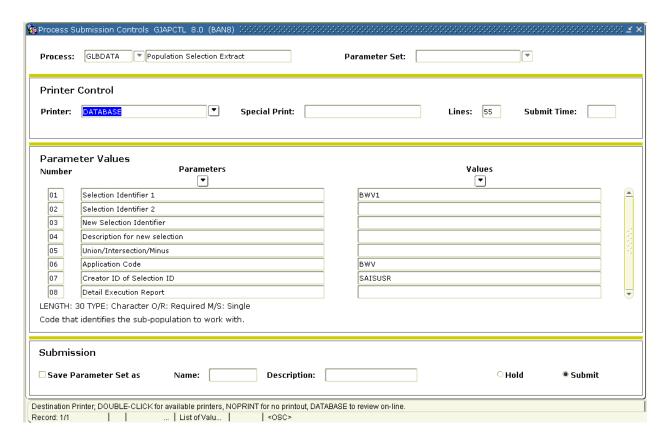
If the results of this extract identify the population receiving a letter, it should be executed before running the Letter Extract Process (GLBLSEL). If the results of this extract identify the population to be used in a report, it must be executed before running that report.

The Process Submission Control Form (GJAPCTL) lets you run a report or process and save the parameters as user-level defaults. If you want to save more than one set of parameters for the report or process, you can save the current set with a unique name. The defaults in each set are associated with the user ID and the job parameter set.

Scenario

The Dean of Women is ready to mail invitations for her reception for married women. She plans to use Population Selection to prepare her invitations. She knows she already has rules defined to select married women. Now she wants to select the results.

Banner form

Process Submission Controls GJAPCTL 8.0 (BAN8)			

Process: GLBDATA ▼ Population Selection Extract   **Parameter Set:** ▼

Printer Control

Printer: DATABASE ▼   **Special Print:**   **Lines:** 55   **Submit Time:**

Parameter Values

Number	Parameters ▼	Values ▼
01	Selection Identifier 1	BWV1
02	Selection Identifier 2	
03	New Selection Identifier	
04	Description for new selection	
05	Union/Intersection/Minus	
06	Application Code	BWV
07	Creator ID of Selection ID	SAISUSR
08	Detail Execution Report	

LENGTH: 30 TYPE: Character O/R: Required M/S: Single

Code that identifies the sub-population to work with.

Submission

☐ **Save Parameter Set as**   **Name:**   **Description:**   ○ Hold   ⦿ Submit

Destination Printer; DOUBLE-CLICK for available printers, NOPRINT for no printout, DATABASE to review on-line.

Record: 1/1 | | | ... | List of Valu... | | <OSC>

Steps

Follow these steps to run the Population Selection Extract process.

1. Access the Population Selection Extract Process (GLBDATA).

2. Enter the desired printer name in the **Printer** field.

   Note: You can enter *DATABASE* to write the report to a table for on-line viewing and to enable the saving of the report to a shared folder on a designated network drive.

3. Enter these parameter values.

Parameter	Description
01: Selection Identifier 1	Enter *MARRIED.*
02: Selection Identifier 2	Leave empty.
03: New Selection Identifier	Leave empty.
04: Description for new selection	Leave empty.
05: Union/ Intersect/Minus	Leave empty.
06: Application Code	Enter *XX_DW* (XX are your initials). Example: *SM_DW*
07: Creator ID of Selection ID	Enter your user ID (If using someone else's population selection you would enter the ID of the creator of the population selection).
08: Detail Execution Report	Leave empty.

4. Click the **Save Parameter Set as** checkbox.

5. Enter a name and description in the **Name** and **Description** fields.

6. Click the **Submit** radio button.

7. Click the **Save** icon to execute the report.

   Result: The Auto hint line displays the job submission number for the report log and list file.

8. Select **Review Output** on the Options menu to review the report.

9. Click the **Exit** icon.

   The output is now ready to run with the Letter Generation process (GLBLSEL and SLRLETR), which will extract the Population Selection result values, track, and prepare the letter for mailing.

Viewing Population Selection Results

Introduction

The Population Selection Extract Data Form (GLAEXTR) is used to display the population of IDs extracted from the database for a specified selection identifier. A population is uniquely identified by an application, selection ID, creator ID, and user ID. The application is the functional area that controls the population. The selection ID identifies the Population Selection, or set of rules, that selected the IDs. The user ID is the Oracle ID of the user who selected the population. This ID defaults to the ID of the person logged on Banner, but you can enter another ID. The user ID must be an ID that previously ran the extract to obtain a population. The creator ID is the ID of the individual who created the Population Selection. Individuals identified by the population selection may be removed using this form. An ID may also be added to the Population Selection using this form.
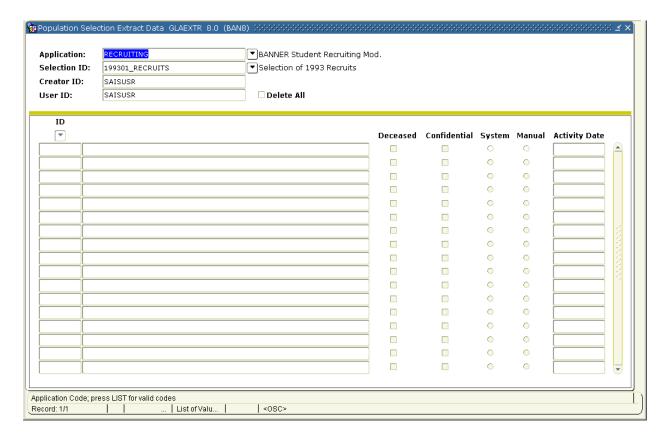
The Population Selection Extract Inquiry Form (GLIEXTR) is used to display a population. A population is uniquely identified by an application, selection ID, creator ID, and user ID. The application is the functional area that controls the population. The selection ID identifies the Population Selection, or set of rules, that selected the IDs. The user ID is the Oracle ID of the user who selected the population. This ID defaults to the ID of the person logged on Banner, but you can enter another ID. The user ID must be an ID that previously ran the extract to obtain a population. The creator ID is the ID of the individual who created the Population Selection. The form is for queries only.

You can click the **Search** icon to display Population Selection IDs on the Population Selection Inquiry Form (GLISLCT). The creator ID is the Oracle ID of the user who created the Population Selection. If a Population Selection is locked, only the creator ID can display any populations created with the Population Selection.

Scenario

The Dean of Women has extracted the population of married women and has asked her assistant to prepare and mail the invitations. The assistant wants to know how many invitations to print. She also is curious about the results and wants to see who will receive this invitation.

Banner form

Steps

Follow these steps to view the population selection results.

1. Access the Population Selection Extract Inquiry Form (GLIEXTR).

2. Enter your application code in the **Application** field.

    Example: *SM_DW.*

3. Enter *MARRIED* in the **Selection ID** field*.*

    Notes: By clicking the **Search** icon next to the **Selection ID** field you can search for your application.

    The **Creator ID** and **User ID** fields auto populate.

4. Select the **Sort by Name** radio button.

5. Perform a **Next Block** function.

6. Review the names.

   Note: If you receive the message "One or more of the persons in this list has Confidential Information," click **OK**.

7. Click the **Rollback** icon.

8. Select the **Sort by ID** radio button.

9. Perform a **Next Block** function.

10. Review the names.

11. Click the **Exit** icon.

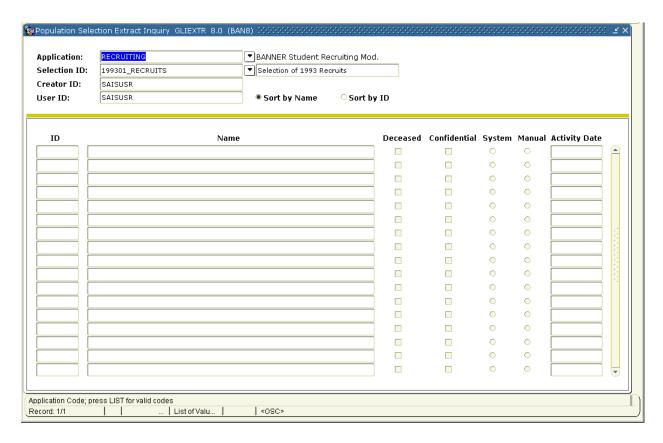# Performing a Query on a Selected Population

Introduction

The Population Selection Extract Data Form (GLAEXTR) or the Population Selection Extract Inquiry Form (GLIEXTR) may be used to display the population of IDs extracted from the database for a specified selection identifier. The Population Selection Extract Inquiry Form (GLIEXTR) allows you to either sort by name or ID.

Scenario

Invitations are ready to go out to the married women's reception. The Dean's selection rules selected all married women. The Dean's Assistant knows that there are several weddings during the upcoming weekend, and she wants to know if those who will be married are on the invitation list.

Banner form

Steps

Follow these steps to perform a population selection query.

1. Access the Population Selection Extract Inquiry Form (GLIEXTR).

2. Ensure that the Key block information still reflects the Population Selection you have been working with.

    Example: Dean of Women Application

    - **Application**   SM_DW

    - **Selection ID** Married

    - Dean of Women Appl–Married

3. Select the **Sort by Name** radio button.

4. Perform a **Next Block** function.

5. Perform an **Enter Query** function.

6. Enter *W%* in the **Name** field to select all last names that begin with a W.

7. Perform an **Execute Query** function.

8. Review the results to determine if Mary White is to receive an invitation.

9. Perform an **Enter Query** function.

10. Enter *B%* in the Name **field** to select all last names that begin with B.

11. Perform an **Execute Query** function.

12. Review the results to determine if Betty Brown is to receive an invitation.

13. Click the **Exit** icon.

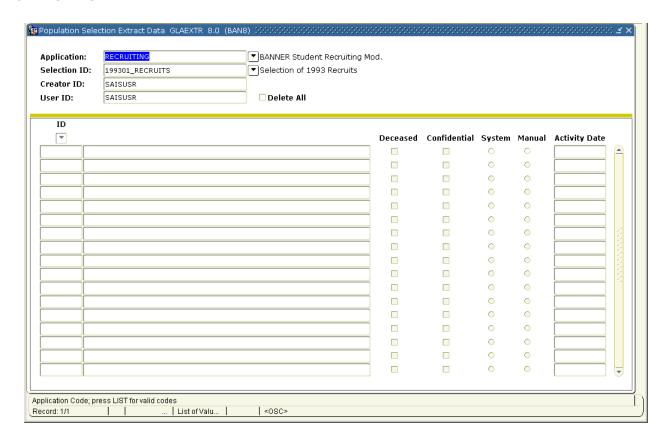# Adding People to a Selected Population

Introduction

The Population Selection Extract Data Form (GLAEXTR) can be used to add or remove people from a population.

Scenario

Invitations are ready to go out for the married women's reception. The Dean's selection rules selected all married women, but the Dean's Assistant knows that there are several weddings on the upcoming weekend, and she wants to add those who will be married to the invitation list.

Banner form

Steps

Follow these steps to add people to a population.

1. Access the Population Selection Extract Data Form (GLAEXTR).

2. Enter the Key block information for the Population Selection you have been working with.

3. Select your application in the **Application** field.

   Example: Select *SM_DW.*

4. Enter *MARRIED* in the **Selection ID** field*.*

   Notes: By clicking the **Search** icon next to the **Selection ID** field, you can search for your application.

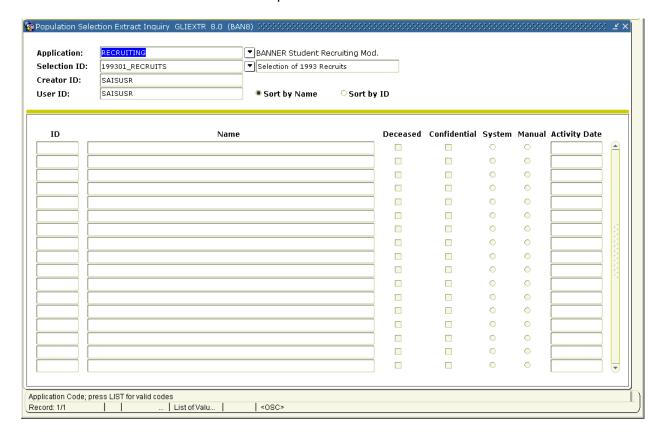   The **Creator ID** and **User ID** fields auto populate.

5. Perform a **Next Block** function.

6. Review the list of names.

7. Perform an **Insert Record** function.

8. Click the **Search** icon.

9. Select Person Search.

10. Enter *B%* in the **Last Name** field to search for all persons whose last name begins with B.

11. Perform an **Execute Query** function.

12. Double-click on the appropriate ID to return it to the Population Selection Extract Data Form.

13. Click the **Save** icon.

    Note: Notice that the System/Manual indicator for the person you have added is *M*(anual), and for the others, it is *S*(ystem).

14. Click the **Exit** icon.

Banner form

The Population Selection Extract Inquiry Form (GLIEXTR) is used to query the population of IDs extracted from the database for a specified selection identifier.

Steps

Follow these steps to perform a population selection query.

1. Access the Population Selection Extract Inquiry Form (GLIEXTR).

2. Enter the Key block information for the Population Selection you have been working with.

3. Select the **Sort by Name** radio button.

4. Perform a **Next Block** function.

5. Perform an **Enter Query** function.

6. Query the name of the person you have just added to the list.

7. Place the form in query mode again and retrieve all persons with a System/Manual indicator of *M.*

8. Click the **M** radio button.

9. Click the **Execute Query** icon.

10. Click the **Exit** icon.

    Note: Queries can be performed on GLIEXTR and GLAEXTR.
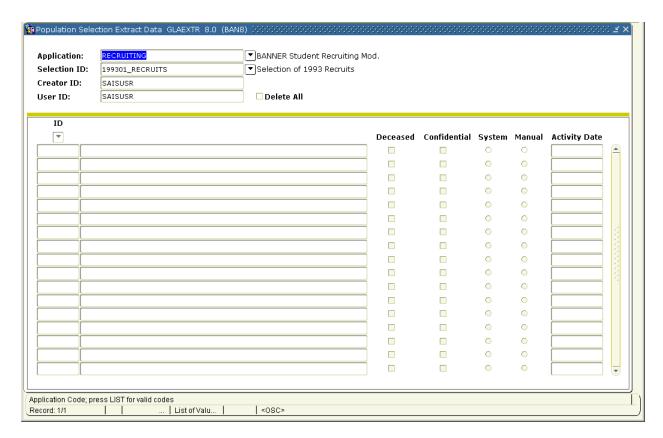
Deleting the Results of a Population

Introduction

The Population Selection Extract Data Form (GLAEXTR) is used to modify the population of IDs extracted from the database for a specified selection identifier.

Scenario

Invitations have gone out to the Dean's reception, and her assistant knows that the Population Selection results used to prepare the invitations are no longer needed. However, the rules used (select married women) will be used again. The assistant wants just to delete the results.

Banner form

Steps

Follow these steps delete the population selection results.

1. Access the Population Selection Extract Data Form (GLAEXTR).

2. Enter the Key block information for the Population Selection you have been working with.

3. Select your application in the **Application** field.

   Example: Select *SM_DW.*

4. Enter *MARRIED* in the **Selection ID** field*.*

   Notes: By double-clicking the **Search** icon next to the Selection ID field, you can use search to find your application.

   The **Creator ID** and **User ID** fields auto populate.

5. Perform a **Next Block** function.

6. Review the list of names.

7. Click the **Rollback** icon.

8. Click the **Delete All?** checkbox.

   You are prompted and asked if you want to delete these results.

9. Click the **Yes** button to indicate that you want to delete these results.

10. Click the **Exit** icon.

11. Access the Population Selection Extract Inquiry Form (GLIEXTR).

12. Perform a **Next Block** function.

13. Verify that your results have been deleted.

    Note: You should receive the message "Warning: No Records Exist."

14. Click **OK.**

15. Click the **Exit** icon.

   Note: When running a process in Job Submission whenever you see a parameter for the following, that process is allowed to be run in conjunction with a population selection.

   - **Selection Identifier**

   - **Application Code**

   - **Creator ID**

   Additionally, some processes will ask for the User ID also as part of the Population Selection criteria.

Summary

Let's review

As a result of completing this workbook, you have

- identified your population for selection

- identified the data fields to be extracted

- created a Population Selection rule based on the criteria for your selection

- created a manual population selection

- ran the Population Selection process

- viewed your Population Selection results

- performed a query on a selected population

- added/deleted people to a selected population

- deleted the results of a population.

Now you are ready to begin determining the information to be implemented within the Banner Population Selection module. You will decide, based upon your organization's needs, which code validation forms and control and rules forms will be used, as well as what your values will be on these forms.

Self Check

Directions

Use the information you have learned in this workbook to complete this self-check activity.

Question 1

Does the Process Submission Control Form allow you to save the parameters that you have entered?

Question 2

The creator ID is the Oracle ID of the user who is extracting the population selection.

True or False

Question 3

If a population selection is locked, only the Creator ID can display any populations created with the Population Selection.

True or False

Question 4

On what forms can you use the Enter and Execute Query functions?

Answer Key for Self Check

Question 1

Does the Process Submission Control Form allow you to save the parameters that you have entered?

Yes, parameters can be saved as user-level defaults.

Question 2

The creator ID is the Oracle ID of the user who is extracting the population selection. (True or False)

False. The creator ID is the Oracle ID of the user who *created* the population selection.

Question 3

If a population selection is locked, only the Creator ID can display any populations created with the Population Selection. (True or False)

True

Question 4

On what forms can you use the Enter and Execute Query functions?

The Population Selection Extract Inquiry Form (GLIEXTR) and the Population Selection Extract Inquiry Form (GLAEXTR) forms.

Appendix

Section goal

The goal of this section is to provide reference materials related to the workbook.

Forms Job Aid

Form	Full Name	Use this Form to...
GLRAPPL	Application Definition Rules Form	define and maintain an application. An application is a functional area with similar characteristics that can be applied to population selections, populations, and variables.
GLRSLCT	Population Selection Definition Rules Form	define, maintain, and copy a population selection. A population selection is a set of rules used to select IDs from the Banner database for reports, processes, and letters. For example, you can use a population selection to select a group of applicants for an orientation letter.
GLROBJT	Object Definition Rules Form	define and maintain an object. An object is a set of common rules used in many different population selections and variables. Objects are not required, but they simplify data entry and provide some consistency.
GLRVRBL	Variable Rules Definition Form	define, maintain, and copy a variable. A variable is a specific piece of data in the database and the set of rules used to select that data.
GLIAPPL	Application Inquiry Form	display a list of all applications defined on the Application Definition Rules Form (GLRAPPL). An application is a functional area with similar characteristics that can be applied to population selections, populations, and variables.
GLISLCT	Population Selection Inquiry Form	display a list of the population selections within an application. A population selection is a set of rules used to select IDs from the Banner database for reports, processes, and letters.
GLIVRBL	Variable Inquiry Form	display a list of all variables defined on the Variable Rules Definition Form (GLRVRBL) for an application. A variable is a specific piece of data in the database and the set of rules used to select that data.

Form	Full Name	Use this Form to...
GLBDATA	Population Selection Extract Process	to extract IDs (people and non-persons) from the Banner database based on the rules entered on the Population Selection Definition Rules Form (GLRSLCT).
GLBLSEL	Letter Extract Process	extract variable data from the Banner database to be included when letters are printed, such as name and address.
GJAPCTL	Process Submission Control Form	run a report or process and save the parameters as user-level defaults. If you want to save more than one set of parameters for the report or process, you can save the current set with a unique name. The defaults in each set are associated with the user ID and the job parameter set.
GLAEXTR	Population Selection Extract Data Form	manually create, change, and display a population. A population is a set of Banner IDs used for reports, processes, and letters. A population is uniquely identified by an application, selection ID, creator ID, and user ID.
GLIEXTR	Population Selection Extract Inquiry Form	display a population. A population is a set of Banner IDs used for reports, processes, and letters. A population is uniquely identified by an application, selection ID, creator ID, and user ID.
GLISLCT	Population Selection Inquiry Form	display a list of the population selections within an application. A population selection is a set of rules used to select IDs from the Banner database for reports, processes, and letters.

Terminology

Application

The Application Code field is used to enter the Application for which the selection is being defined.

Note: This is required to run the process.

Selection ID

The selection field contains the name of the selection being defined.

Note: This is required to run the process.

Creator ID

The name of the user who created the selection being defined.

Note: This is required to run the process.

Data element

Database column name to be used as part of the rules statement (the field name or data you wish to extract).

Operator

The operator equals (=), less than (<), greater than (>), etc. are to be used as part of the rules statement.

Value

The value to be compared (literal text, date value, number, another column or a subquery) as part of the rules statement.

Variable

A specific piece of data in the database and the set of rules used to select that data.

Dynamic parameter

A parameter that allows you to enter a different distinct value every time you utilize the rule in which it was created.