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Banner Accounts Receivable
Release Guide

Release 8.5
September 2014

Revision History

Publication Date	Summary
September 2014	New version that supports Banner AR 8.5 software.

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Introduction

This guide documents the Banner® Accounts Receivable 8.5 release, which includes Enhancements and Change Requests (Enhancements and Defects).

Enhancements Overview

Previously, TSRCBIL was the only process to produce Student Bills. The TSRCBIL process was used for both regular bills and schedule bills, and had many run time parameters. Some parameters were used for only regular bills, some parameters were used for only schedule bills, and some parameters were used for both regular bills and schedule bills. Some of the regular bill parameters needed to be populated, even though they were not needed for schedule bills.

To increase usability, improve efficiency, and simplify maintenance, the student billing process (TSRCBIL) has been split into two new and separate processes.   One of the new processes is specific to Student Regular Bill (TSRRBIL) and the other process is specific to Student Schedule Bill (TSRSBIL). The ability to apply credits exists within each of the two new processes. Institutions may use the process that better fits their business need.

The re-write also removes the old RPT code and consolidates code where applicable.

> **Note:** TSRCBIL will exist concurrently with these new processes until a later date to allow you to time move to the new processes. As of this release, change requests (defects and enhancements) have been and will continue to be resolved in the new processes only.

Student Regular Bill Enhancement - Functional

This section discusses functional changes to the new Student Regular Bill Statement process (TSRRBIL).

Student Regular Bill Enhancement - Technical

This section discusses technical changes to the new Student Regular Bill Statement process (TSRRBIL).

Student Schedule Bill Enhancement - Functional

This section discusses functional changes to the new Student Schedule Bill Statement (TSRSBIL).

Student Schedule Bill Enhancement - Technical

This section discusses technical changes to the new Student Schedule Bill Statement process (TSRSBIL).

Cumulative Documentation and Patches

This document provides detailed information about the Banner Accounts Receivable 8.5 release only. Banner Accounts Receivable 8.5 is a cumulative release that includes:

- Banner Accounts Receivable 8.4.1 release

- Banner Accounts Receivable 8.4.2 release

- Banner Accounts Receivable 8.4.3 release

- Banner Accounts Receivable 8.4.4 release

- Banner Accounts Receivable 8.4.5 release

- Patches delivered after Accounts Receivable 8.4.5

Releases/Patches

The following releases are included in Release 8.5. Release Guides and additional information on these releases and patches can be found at the Ellucian Support Center (http://www.ellucian.com/Solutions/Ellucian-Client-Support/). Please see the following summarized list:

Release/Patch Number	Dates	Comments	Additional information
Banner Accounts Receivable 8.4.1 release	June 2012	Release	Includes Enrollment Period Student Billing Update, and Unapplication of Direct Invoice Payments.
Banner Accounts Receivable 8.4.2 release	November 2012	Release	Includes 1098T change request enhancements and defects
Banner Accounts Receivable 8.4.3 release	December 2012	Release	Includes miscellaneous change request enhancements and defects
Banner Accounts Receivable 8.4.4 release	May 2013	Release	Includes Account Comments enhancement
Banner Accounts Receivable 8.4.5 release	August 2013	Release	Includes Deposit and Fee Payments enhancement. **Note:** The Student Self-Service patch 8.5.4.4 is required in order to use the functionality delivered in AR 8.4.5.
`pcr-000107070_tas8040501`	January 2014	Change Request - Defect Posting	TSR1098 change requests: • CR-000107070 • CR-000107184
`pcr-000113743_tas8040502`	June 2014	Change Request - Defect Posting	TSRLBOX change request CR-000113743

System Requirements

Before you install and use Banner Accounts Receivable release 8.5., you must install the Banner General release 8.6 and Banner Accounts Receivable release 8.4.

Student Regular Bill Enhancement - Functional

New Process

Student Regular Bill Statement Process (TSRRBIL)

TSRRBIL enables you to create credits for student accounts or generate invoices or statements for students. The output of TSRRBIL depends upon the values selected for the parameters and the run mode chosen.

> **Note:** Student Schedule bills are produced using TSRSBIL; Third-party contractors are billed using TSRTBIL; non-student accounts are billed using TFRBILL.

Create Credits and Update Accept Charges Indicator

To create credits and update accounts, run TSRRBIL in *STATEMENT or APPLYCRED* mode using the Create Cont, Dep, Expts Credits parameter set to *Y.* If you prefer not to produce an invoice or statement, run TSRRBIL in APPLYCRED mode. If the Update Accept Charges parameter is *Y,* TSRRBIL sets the AR indicator in registration and location management to *Y* for students with new credits. If the Update Accept Charges - Fin Aid parameter is *Y,* TSRRBIL sets the AR indicator in registration and location management to *Y* for students who have had financial aid previously disbursed to their account.

Multiple contracts and exemptions can be processed per term. If charges to a student's account exceed the amount of a third party payment or an exemption, Banner uses the information established on the Contract Authorization Form (TSACONT) and/or the Exemption Authorization Form (TSAEXPT) to determine which account source, category code, or detail code to apply first.

Create Credits and Update Accept Charges Indicator for Non Enrollment Period Bills

If Create Cont, Deposits, Expts Ind = Y and Include Enrollment Period Bill = N:

- When run in INVOICING mode, contract and exemption credits are estimated for the run term.

- When run in STATEMENT mode, contract and exemption credits are posted and deposits are released for the run term. If the Update Accept Charges parameter = Y, the

AR indicator is set to Y in registration and location management for students with new credits.

- When run in APPLYCRED mode, contract and exemption credits are posted and deposits are released for the run term without producing a bill.

  Note: The Include Enrollment Period Bills parameter must be set to N when run mode is APPLYCRED.

Create Credits and Update Accept Charges Indicator for Enrollment Period Bills

If Create Cont, Deposits, Expts Ind = Y and Include Enrollment Period Bill = Y:

- When run in INVOICING mode, contract and exemption credits are estimated for all terms in the student's enrollment period.

- When run in STATEMENT mode, contract and exemption credits are processed and deposits are released for all terms in the student's enrollment period. If the Update Accept Charges parameter = Y, the AR indicator is set to Y in registration and location management for all terms in the student's enrollment period for which credits are created.

  Note: APPLYCRED run mode is not allowed when the Include Enrollment Period Bills parameter is set to Y.

Update Accept Charges Indicator for Financial Aid

If the Update Accept Charges-Fin Aid parameter is Y, the process sets the AR indicator to Y in registration and location management for students who have financial aid disbursed to their account.

  Note: When the Update Accept Charges Indicator for Financial Aid is set to Y(es), it does not invoke the disbursements process. It checks a student's account for the existence of disbursed financial aid.

Update Accept Charges Indicator-Fin Aid for Non Enrollment Period bills

If Include Enrollment Period Bill = N and Update Accept Charges-Fin Aid = Y:

- When run in INVOICING mode, the Update Accept Charges-Fin Aid parameter is not functional. AR indicator will not be updated.

- When run in STATEMENT mode, the AR indicator in registration and location management is set to Y for students who have financial aid disbursed to their account for the run term.

- When run in APPLYCRED mode, the AR indicator in registration and location management is set to Y for students who have financial aid disbursed to their account for the run term.

> **Note:** The Create Cont, Deposits, Expts Ind parameter must be Y when process is run in APPLYCRED mode.

Update Accept Charges Indicator-Fin Aid for Enrollment Period bills

If Create Cont, Deposits, Expts Ind = Y and Include Enrollment Period Bill = Y:

- When run in INVOICING mode, the Update Accept Charges-Fin Aid parameter is not functional. AR indicator will not be updated.

- When run in STATEMENT mode, the AR indicator in registration and location management is set to Y for students who have financial aid disbursed to their account for any term in the enrollment period.   The AR indicator is updated for all terms in the student's enrollment period.

> **Note:** APPLYCRED run mode is not allowed when the Include Enrollment Period Bills parameter is set to Y.

Produce Invoices/Statements

To produce an Invoice or a Statement for a student, run TSRRBIL in INVOICING or STATEMENT mode.

- When run in INVOICING mode, TSRRBIL prints invoices and estimates credits based on current charges without updating the account. The header for the output is *BILLING INVOICE*. Invoice amounts may display in a currency other than the base currency, depending upon the value in the Currency Code parameter.

- When run in STATEMENT Mode, TSRRBIL calculates and applies credits (if the parameter to create contracts, exemptions, and deposits is Y), updates the account with bill and due dates for charges and credits (when the effective date is reached), and prints statements. The header for the output is BILLING STATEMENT. After TSRRBIL is run once, previously billed items are totaled and included on the statement as the previous billed balance. Future due charges are displayed in detail based on the parameters selected until the effective date is reached. Statement amounts may display in a currency other than the base currency, depending upon the value in the Currency Code parameter.

Single ID

To produce an invoice for an *individual (single ID)*:

- Enter a valid ID in the ID Number parameter.

- Leave the population selection parameters blank.

Population Selection

To produce an invoice or statement for a group of students:

- Enter a valid population defined by entering Selection Identifier, Application Code, Creator ID, and User.

- Leave the ID parameter blank.

Mass Mode

To produce an invoice or statement for *all students*, leave the following parameters blank:

- ID Number (or "Collector),

- Selection Identifier,

- Application Code,

- Creator ID, and

- User.

E-bill Functionality

When you run TSRRBIL in STATEMENT mode, a unique statement number is generated for each bill. This statement number is stored in the Statement Header Table as `tbbstmt_stmt_number` and prints in the statement output. The statement may be stored in order to be able to retrieve a copy using the Luminis Statement Channel, Self-Service, or the Statement and Payment History Inquiry Form (TGISTMT). For information about storing individual statements, please refer to the FAQ section in the Accounts Receivable TRM Supplement.

The statement number appears in the billing output, as follows:

- In STATEMENT mode, the statement number appears on the 3rd line, beginning in the first position.

- In INVOICING mode, values from the statement number sequence are used during processing that are subsequently deleted from the TBBSTMT table. As a result, there will be gaps in the values that are in the `tbbstmt_stmt_number` column.

Refer to Article/FAQ: 000006682 (1-IHS99): Issue: How do I store statements for use with AR eBill?

Attached to the Article/FAQ is an example syntax to parse the `tsrrbil.lis` file as well as the SQLPLUS script to update the `tbbstmt` data after the `tsrrbil` file has been parsed. The attachments are:

1. FAQ for eBill

    Multiple questions/answers related to eBill processing.

2. `parse_rbil.pl`

    Example of a perl script that can be used to perform parsing of TSRRBIL Regular Bill output.

3. `parse_sbil.pl`

    Example of a perl script that can be used to perform parsing of TSRSBIL Schedule Bill output.

4. `load_stubill.sql`

    Example of pl/sql script for storing the statement files using `tb_statement` API.

Also see FAQ 1-IPPO9 for specifics related to Evisions processing with eBill.

Include Zero Balances Parameter

There are three valid values for this parameter.

- *C* - Include all zero balances with activity since the last statement date.

- *Y* - Include all zero balances.

- *N* - Exclude all zero balances.

The value chosen for this parameter determines the accounts for which bills will be generated, as summarized in the following charts.

Chart 1 - Sample Accounts

	Account 1	Account 2	Account 3	Account 4
Previous Balance	N/A	0.00	0.00	200
Current Activity[1]	none	none	100.00	-200
Account Balance	0.00	0.00	-100.00	0.00

[1.] *Your database may include old transaction records which would appear to be Current Activity since* `tbraccd_bill_date` *and* `tbraccd_due_date` *are null. You may want to update these columns on long closed accounts before implementing the (C)urrent activity parameter option for zero balances.*

Chart 2 - Impact of Include Zero Balance Parameter on Output

Parameter Options	Account 1	Account 2	Account 3	Account 4
N (exclude all zero balances)	Not Printed	Not Printed	Not Printed	Not Printed
C (include zero balances only if current activity)	Not Printed	Not Printed	Printed	Printed
Y (include all zero balances)	Not Printed	Not Printed, Mass mode Printed, if included in Population Selection	Printed	Printed

Note: The value for the Zero Balance Parameter can override the Minimum Balance parameter.

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Parameter	Name	Required?	Description	Values
01	Term	Y	Process term code This code is used by the system to identify contract, exemption rules and deposits to be included in processing if the Create Cont, Dep, Expt Credits parameter is set to Y. It will also be used to identify financial aid and memos for the bill run.	Term Code Validation Form (STVTERM)
02	Address Selection Date	Y	Date used to find active address, entered in `DD-MON-YYYY` format.	
03	Address Type Hierarchy	Y	Enter the address type to be printed on the invoice/ statement. Multiple requests are permitted and must be entered in priority sequence. For example, 1MA 2PR will first print the mailing address, and if none is found, will print the permanent address.	Address Type Code Validation Form (STVATYP)
04	ID Number	N	If an ID number is entered, the process will only produce invoices. If the Run Mode is STATEMENT then this parameter may *not* be populated.	ID Number - The number for which the invoice is to be produced. blank - Process all accounts or process a specified population.

Parameter	Name	Required?	Description	Values
05	Printer	N	Indicate the printer destination for this process for NOSLEEP processing. If you requested a printer through the Account Printer Selection Form (TOADEST), the TOADEST printer is used. If TOADEST printer is null, then the printer value entered is used.	Printer Validation (GTVPRNT)
06	Selection Identifier	N	Enter the code that identifies the population with which you wish to work. The selection identifier must be defined on the Population Selection Inquiry Form (GLISLCT). All or none of the population selection parameters must be entered.	
07	Application Code	N	Enter the code that identifies the general area for which the selection identifier was defined. All or none of the population selection parameters must be entered. The Population Selection Extract Inquiry Form (GLIEXTR) may be used to review the people who will be processed.	Application Inquiry Form (GLIAPPL)
08	Creator ID	N	Enter the user ID of the person creating the sub-population rules. The creator ID must have been specified when defining the selection identifier. All or none of the population selection parameters must be entered.	
09	User	N	ID of the person who ran the population selection.	

Parameter	Name	Required?	Description	Values
10	NOSLEEP Default Bill Format	Y	Enter 1 for Regular bill format. Enter 2 for Schedule Bill format. **Note:** This parameter exists on both the TSRRBIL and TSRRBIL processes. The value entered in this parameter should match the value entered in the NOSLEEP Default Bill Format parameter of TSRSBIL. This value determines whether you are running NOSLEEP invoices or NOSLEEP schedule invoices when requesting invoices online for insert into the collector table (TBRCBRQ).	*1* Regular invoice produced in NOSLEEP mode (Default) *2* Schedule Bill invoice produced in NOSLEEP mode

Parameter	Name	Required?	Description	Values
11	Include Enrollment Period Bill	Y	A value of *Y* invokes enrollment period processing using the Term parameter to determine if multi-term periods exist. • If multi-term enrollment periods exist, for each student selected for billing, the process will determine if the student belongs to one of the multi-term enrollment periods. • If the student belongs to one of the multi-term enrollment periods, the process will print the new enrollment period bill format for that student. A value of N does not invoke enrollment period processing. As a result, bills print in the Standard (non- enrollment period) format. This parameter is used in INVOICING and STATEMENT run modes. **Note:** This parameter is only functional if Banner Financial Aid is installed at your institution.	*Y* Include enrollment period bills in bill run *N* Do not include enrollment period bills in bill run (default)
12	Print Enroll Period Term Note	N	Enter a value of Y if you want the process to print a note on enrollment period bills indicating the terms included in the student's enrollment period. This parameter is used in *INVOICING* and *STATEMENT* run modes for bills printed in the enrollment period format.	*Y* Print enrollment period term note *N* Do not print enrollment period term note (default)

Parameter	Name	Required?	Description	Values
13	Update Accept Charges	Y	For standard (non-enrollment period) bill outputs, this parameter updates the Accept Charges indicator when credits are posted to the student's account. For enrollment period bill outputs, this parameter updates the Accept Charges indicator for all terms in the student's enrollment period for which credits are posted. This parameter applies to STATEMENT mode and APPLYCRED mode.	*Y* Sets the AR indicator in registration (SFBETRM) and location management (SLRRASG, SLRMASG, SLRPASG) *N* Do not update accept charges flags
14	Run Mode	Y	Choose one of three run modes: INVOICING - prints invoices and estimates credits based on current charges without updating the account. Any charge and payment transactions listed in detail when the process is run in INVOICING mode will show in detail until they are processed through a STATEMENT run. STATEMENT - prints statement of charges/ payments, updates bill date and due date, begins aging process. APPLYCRED - calculates and applies credits for contracts, exemptions, and deposits, but will not produce a bill.	*INVOICING* (default) *STATEMENT* *APPLYCRED*
15	Currency Code	N	The user can specify foreign currency in which invoices and statements will be produced.	Currency Code List (GTVCURR)

Parameter	Name	Required?	Description	Values	
16	Billing Date	Y	This date will be used to determine what transactions are current based on the effective date, and in STATEMENT mode will update the Bill Date of the transaction.	Any valid date in DD-MON-YYYY format. The default is sysdate.	
17	Due Date	Y	Due Date displayed on the bill when run in INVOICING and STATEMENT mode. Also used in STATEMENT mode to update the due date of the transaction.	Any valid date. The Due Date must be equal to or greater than the Bill Date.	
18	Print Future Detail Indicator	Y	Enter *Y* if you want detail with future effective dates to be printed on invoices/ statements. These details will be printed but will NOT be updated with a bill date and due date when the process runs in STATEMENT mode.	*Y*	Print future detail (default)
				N	Do not print future detai
19	Futures Print Date	N	Specify a date to display when future items are printed.		
20	Print Order	Y	Specify the sort order for the output. **Note:** Bills for which there are no valid address will be printed first.	*I*	ID number order
				N	Alpha/last name order
				ZI	*Z*ip code and ID number order
				Z	ZN prints in Zip Code and alpha/ last name order (default)

Parameter	Name	Required?	Description	Values
21	Create Cont, Dep, Expt Credits	Y	The process can be run for standard (non-enrollment period) output or enrollment period bill output. If the Include Enrollment Period Bill parameter is set to N and the Create Cont, Dep, Expts Credits parameter is set to Y, then: • When run in INVOICING mode, contract and exemption credits are estimated for run term. • When run in STATEMENT mode, contract and exemption credits are processed and deposits are released for run term. If the Include Enrollment Period Bill parameter is set to Y and the Create Cont, Dep, Expts Credits parameter is set to Y, then: • When run in INVOICING mode, contract and exemption credits are estimated for all terms in the student's enrollment period. • When run in STATEMENT mode, contract and exemption credits are processed and deposits are released for all terms in the student's enrollment period. **Note:** In APPLYCRED, this parameter must be set to Y	*Y* (default) estimates or calculates credits *N* No estimates or calculations

Parameter	Name	Required?	Description	Values	
22	Include Zero Balances	Y	The Include Zero Balance parameter includes three valid values. This makes it possible for the institution to bill accounts with activity that nets to zero and to avoid billing accounts with no activity. Minimum Account Balance refers to current due account balance. If option C is selected and the only activity on the account is future dated, the account will not be billed if the Print Future Detail Ind is set to N. **Note:** The value entered here is overridden by the value entered for the Include Zero Balance parameter.	*N*	Exclude all zero balances.
				C	Include zero balances only if there was activity on the account
				Y	Include all zero balances
23	Minimum Acct Balance	Y	Enter minimum balance required for account to be billed. You can request invoices/statements for accounts with a minimum balance, and use negative numbers to retrieve accounts with a credit balance. **Note:** Minimum Account Balance refers to current due account balance. The value entered here is overridden by the valued entered for the Include Zero Balance parameter.		
24	Detail Codes to Bill (% valid)	Y	Can produce invoices/statements based on detail code. You may use% as a wildcard along with some characters of the detail code to get groups of details (for example: *R%*).	Detail Code Control Form (TSADETC) *%*All (default)	

Parameter	Name	Required?	Description	Values	
25	Accounts (P)ers (C)omp or %	Y	Can produce invoices/ statements.	*P*	Person accounts
				C	Company accounts
				%	All accounts (default)
26	Print Other Memos	Y	Other Memos are memos where source code is not C(ontract) or E(xemption).	*Y*	Print other memos (default)
			When this parameter is set to No, other memos are not printed on the bill.	*N*	Do not print other memos
			When this parameter is set to Yes, other memos are printed on the bill as follows.		
			Standard (non-enrollment period) bill format:		
			• Financial Aid Memos for terms NOT matching the run term display in the Other Financial Aid Memos section of the bill.		
			• All other memos display in the Memo Items section of the bill without regard to term.		
			Enrollment period bill format:		
			• Financial Aid Memos for terms NOT matching a term in the Enrollment Period display in the Other Financial Aid Memos section of the bill.		
			• All other memos display in the Memo Items section of the bill without regard to term.		
27	Do you want deposits printed	Y	Indicate whether you want to print deposits.	*Y*	Print deposits (default)
				N	Do not print deposits

Parameter	Name	Required?	Description	Values	
28	Preauth Credits Affect Amt Due	Y	Make a selection that indicates which pre-authorization credits affect the amount due.	B	Both Contracts and Exemptions
			• If authorization to use a contract is not required, as specified on the Student Billing Control Form (TSACTRL), this parameter is non-functional and contracts will not affect amount due even if the value is *B* or *C*.	C	Contracts only
				E	Exemptions only
			• If authorization to use a contract is required, enter Y to affect amount due by the total of pre-authorized charges.	N	None
29	Do Dynamic Calculations	N	Indicates if a dynamic calculation of automated installment plans, with a presentation of amount due and future installment detail, should appear on the bill.	Y	Include dynamic installment plans.
			Note: This parameter can be used in *INVOICING* or *STATEMENT* mode, and can be run only once per term.	*N* (or blank	Do not include dynamic installment plans.

Parameter	Name	Required?	Description	Values	
30	Print Financial Aid Memos	N	Indicate whether you want to print financial aid memos with this report.	Y	Print financial aid memos
			This parameter is used in INVOICING and STATEMENT run modes for bills printed in the enrollment period format and standard format.	N	Do not print financial aid memos
			For enrollment period format bills, a value of *Y* prints financial aid memos matching a term in the student enrollment period. For standard (non-enrollment period) format bills, a value of *Y* prints financial aid memos matching the run term.		
31	FinAid Memos Affect Amount Due	N	Enter Y if you want financial aid memos printed on the bill to affect amount due.	Y	Financial aid memos affect amount due
			This parameter is used in *INVOICING* and *STATEMENT* run modes for bills printed in the enrollment period format and standard format.	N	Financial aid memos do not affect amount due (default)

Parameter	Name	Required?	Description	Values	
32	Other Memos Affect Amount Due	Y	For details, see the Values column. This parameter is used in INVOICING and STATEMENT run modes for bills printed in the enrollment period format and standard format.	*N*	Other memos do not affect amount due (default)
				F	Financial aid memos printed in the "Other Financial Aid Memos" section affect amount due
				O	Other (Non financial memos) printed in the "Memo Items" section of the bill will reduce the Amount Due
				B	All Other Memos reduce the Amount Due.

Parameter	Name	Required?	Description	Values	
33	Print a control report	N	For details, see the Values column.	Y	Print control report (default)
				N	Do not print control report
34	Print expanded address for	Y	For details, see the Values column.	1	Window envelope
				2	Non-window envelope
				3	None
35	Update Accept Charges - Fin Aid	Y	For standard (non-enrollment period) bill outputs, this parameter updates the Accept Charges indicator if Financial Aid disbursements exist on the student's account for the run term.	Y	Sets the AR indicator in registration (SFBETRM) and location management (SLRRASG, SLRMASG, SLRPASG)
			For enrollment period bill outputs, this parameter updates the Accept Charges indicator for all terms in the student's enrollment period if Financial Aid disbursements exist on the student's account for any term in the student's enrollment period.	N	Do not update accept charges flags
			This parameter applies to STATEMENT mode and APPLYCRED mode.		

Student Regular Bill Enhancement - Technical

This chapter describes the technical changes that support the new Student Regular Bill Statement process (TSRRBIL).

New Package

The following package is new for this release.

Procedures and Functions for Billing Processes (TSKBILL)

This new package stores procedures and functions for the new billing processes. The following objects are new:

- **tskbill.sql**
- **tskbill1.sql**

Package procedures are called by TSRSBIL and TSRRBIL.

Procedures Added in this Package

Procedure	Description
p_apply_credit_all_terms	Heading routine called by TSRSBIL and TSRRBIL for the application of credits for all terms for fetched PIDM.
p_apply_credits	Internally called by p_apply_credit_all_terms and it is main macro for release of exemption, contracts, and deposits. Parameter indicators determine if credits and/or financial aid will be processed in this run and processing order for contracts and exemptions. The UPD_AR_INDS is processed when deposits or contract/exemptions are posted to the TBRACCD table.
p_delete_depo_memos	Deletes from TBRMEMO.
p_process_deposit	Implements tb_deposit.p_release.
p_build_extract_cursor_string	Dynamically builds the statement to select PIDMs, with receivable information to support processing decisions.
p_build_process_cursor_string	Builds selection from TBBSTMT dynamically in build_process_cursor_string to set sorts, used as driver for the production of the bills.
p_upd_ar_inds	Updates AR indicators when deposits or contract/exemptions are posted to the TBRACCD table.
p_ins_tbbstmt	Inserts the record to statement header table for processing.
p_del_tbbstmt	Purges statement header. When in an update mode we leave the TBBSTMT records which may be associated to a saved file and used to display statements. When not in an update mode we purge the records after using them for sort and print of invoices.
p_upd_tbbstmt	Updates statement header.
p_calc_amount_due	Calculates amount due. Currently called by TSRRBIL.
p_calc_othmemo_affct_amount	Calculates Other amount due. Called by TSRRBIL.
p_calc_finaidmemo_affct_amount	Calculates Finaid amount due. Called by TSRRBIL.

Procedure	Description
p_calc_past_due	Calculates past due. Called by TSRRBIL.
p_get_prev_chg_amt	Sums the previous billed charges. Used in TSRRBIL.
p_get_prev_pay_amt	Sums the previous billed payments. Used in TSRRBIL.
p_calc_memo_affct_amount	Calculates pre-authorized credits' effect on total due. Used in TSRRBIL.
p_sel_details_curr	Gets all current charges and payments for PIDM being processed.
p_sel_details_future	Gets all future charges and payments for PIDM being processed TSRRBIL
p_sel_future_cc	Gets all future charges and payments for PIDM being processed, but convert to foreign currency.
p_sel_memos_faid	Fetches record for MEMOED FINANCIAL AID section
p_sel_memos	Section will have records with source code not as C, D and E. Plus 'F' only if it doesn't belong to this term in case of Non-EP bill and not for any terms in an EP in case of EP bill.
p_sel_spec_memos	Gets pre-authorized credits for entity being billed.
p_sel_fut_deposits	Processes deposits for third party. Any auto release deposits will already have been released in the credit portion of this report. This select will grab any ones left over.
p_selpers	Selects the name prefix/suffix and deceased indicator from person
p_getpidm	Gets PIDM for individual account run.
p_getpidm2	Helps in preventing run for ID which is 3rd party or has all 'ARTERM' entries.
p_get_conv_rate	Fetches currency conversion rate.
p_validate_curr_code	Populates currency title, needed for the foreign currency message.
p_determine_eff_date	Formats Bill Date to effective date time.
p_dc_futures_date	Formats Future Date.
p_del_parms_fcn	Deletes records from GJBPRUN after fetching all jobsub parameters.

Functions Added in this Package

Function	Description
get_gubinst_info	Fetches Institution details from GUBINST.

Changed Packages

The following packages have been changed.

Package Called Job Submission to Validate AR Parameters (TOKPVAL)

tokpval.sql

New procedures added for TSRRBIL and TSRSBIL jobsub parameter validations.

- P_VALID_POPSEL_PARM_TSRRBIL

- P_VALID_TSRRBIL_PARMS

- P_VALID_POPSEL_PARM_TSRSBIL

- P_VALID_TSRSBIL_PARMS

tokpva1.sql

New procedures added for TSRRBIL and TSRSBIL jobsub parameter validations.

- P_VALID_POPSEL_PARM_TSRRBIL

- P_VALID_TSRRBIL_PARMS

- P_VALID_POPSEL_PARM_TSRSBIL

- P_VALID_TSRSBIL_PARMS

Seed Data

Script	Result
tgjbjobsi_080500	Insert new/modified GJBJOBS records for TSRSBIL and TSRRBIL.
tgjbpdefi_080500	Insert new jobsub parameter for TSRRBIL, TSRSBIL.
tgjbpdfti_080500	Insert new jobsub parameter in GJBPDFT for TSRRBIL, TSRSBIL.
tgjbpvali_080500	Insert new jobsub parameter in GJBPVAL for TSRRBIL, TSRSBIL.
tgobfeobi_080500	Insert in GOBFEOB
tgubobjsi_080500	Add new objects in GUBJOBS - TSRSBIL and TSRRBIL

Student Schedule Bill Enhancement - Functional

Changed Form

The following form has been changed for this release:

Schedule/Bill Rules Form (TSASBRL)

New Indicators

The following new indicators have been added.

> **Note:** These columns were previously added to the TBBSBRL table in the AR 8.4 release and are now being displayed on the AR 8.5 version of the form.

Field	Table Column	Description
Print Other Memos	`TBBSBRL_PRINT_OTHER_MEMOS`	Select the **Print Other Memos** check box to display other memos on the schedule/bill. Clear this check box if you do not want Other Memos to display on the schedule/bill. • For enrollment period schedule/ bill outputs, other memos print if the term matches a term in the student's enrollment period. • For standard (non-enrollment period) schedule/bill outputs, other memos print if the term matches the run term (Term) parameter.

Field	Table Column	Description
Other Memos Affect Amount Due	`TBBSBRL_OTHER_MEMO_A FFECT_DUE`	Select the **Other Memos Affect Amount Due** check box to have other memos affect amount due. Clear this check box to ensure that other memos will not affect amount due.

New Process

The process in this section is new with this release.

Student Sched Bill Statement Process (TSRSBIL)

TSRSBIL enables you to create credits for student accounts or generate invoices or statements for students.   The output of TSRSBIL depends upon the values selected for the parameters and the run mode chosen.

> **Note:** Student Regular bills are produced using TSRRBIL; Third-party contractors are billed using TSRTBIL; non-student accounts are billed using TFRBILL.

Create Credits

To create credits and update accounts, run TSRSBIL in SCHEDSTMT or APPLYCRED mode using the Create Cont, Dep, Expts Credits parameter set to Y. If you prefer not to produce a schedinv or schedstmt, run TSRSBIL in APPLYCRED mode. If the Update Accept Charges parameter is Y, TSRSBIL sets the AR indicator in registration and location management to Y for students with new credits. If the Update Accept Charges - Fin Aid parameter is Y, TSRRBIL sets the AR indicator in registration and location management to Y for students who have had financial aid previously disbursed to their account.

Multiple contracts and exemptions can be processed per term. If charges to a student's account exceed the amount of a third party payment or an exemption, Banner uses the information established on the Contract Authorization Form (TSACONT) and/or the Exemption Authorization Form (TSAEXPT) to determine which account source, category code, or detail code to apply first.

Create Credits and Update Accept Charges Indicator for Non Enrollment Period Bills

If Create Cont, Deposits, Expts Ind = Y and Include Enrollment Period Bill = N:

- When run in SCHEDINV mode, contract and exemption credits are estimated for the run term.

- When run in SCHEDSTMT mode, contract and exemption credits are posted and deposits are released for the run term. If the Update Accept Charges parameter = Y, the AR indicator is set to Y in registration and location management for students with new credits.

- When run in APPLYCRED mode, contract and exemption credits are posted and deposits are released for the run term without producing a bill.

  Note: The Include Enrollment Period Bills parameter must be set to N when run mode is APPLYCRED.

Create Credits and Update Accept Charges Indicator for Enrollment Period Bills

If Create Cont, Deposits, Expts Ind = Y and Include Enrollment Period Bill = Y:

- When run in SCHEDINV mode, contract and exemption credits are estimated for all terms in the student's enrollment period.

- When run in SCHEDSTMT mode, contract and exemption credits are processed and deposits are released for all terms in the student's enrollment period. If the Update Accept Charges parameter = Y, the AR indicator is set to Y in registration and location management for all terms in the student's enrollment period for which credits are created.

  Note: APPLYCRED run mode is not allowed when the Include Enrollment Period Bills parameter is set to Y.

Update Accept Charges Indicator for Financial Aid

If the Update Accept Charges-Fin Aid parameter is Y, the process sets the AR indicator to Y in registration and location management for students who have financial aid disbursed to their account.

  Note: When the Update Accept Charges Indicator for Financial Aid is set to Y(es), it does not invoke the disbursements process. It checks a student's account for the existence of disbursed financial aid.

Update Accept Charges Indicator-Fin Aid for Non Enrollment Period Bills

If Include Enrollment Period Bill = N and Update Accept Charges - Fin Aid = Y:

- When run in SCHEDINV mode, the Update Accept Charges - Fin Aid parameter is not functional. AR indicator will not be updated.

- When run in SCHEDSTMT mode, the AR indicator in registration and location management is set to Y for students who have financial aid disbursed to their account for the run term.

- When run in APPLYCRED mode, the AR indicator in registration and location management is set to Y for students who have financial aid disbursed to their account for the run term.

  Note: The Create Cont, Deposits, Expts Ind parameter must be Y when process is run in APPLYCRED mode.

Update Accept Charges Indicator-Fin Aid for Enrollment Period Bills

If Create Cont, Deposits, Expts Ind = Y and Include Enrollment Period Bill = Y:

- When run in SCHEDINV mode, the Update Accept Charges - Fin Aid parameter is not functional. AR indicator will not be updated.

- When run in SCHEDSTMT mode, the AR indicator in registration and location management is set to Y for students who have financial aid disbursed to their account for any term in the enrollment period.   The AR indicator is updated for all terms in the student's enrollment period.

  Note: APPLYCRED run mode is not allowed when the Include Enrollment Period Bills parameter is set to Y.

Generate a Schedule/Bill

Before you can run TSRSBIL for a schedule bill, you must first set up rules on the Schedule/Bill Rules Form (TSASBRL). To generate a Schedule bill for a student, run TSRSBIL in SCHEDSTMT or SCHEDINV mode. A schedule bill is a combination of a student's schedule of classes and their charges and credits. In SCHEDSTMT mode, the bill and due date are updated for unbilled transactions, without regard to term, that are included in Amount Due.

A schedule bill can be produced for either an individual or a group of students. When running a schedule bill for a single ID, students are selected without regard to whether the student is registered for the term; for example, an enrollment term header record (SFBETRM) is not required. When running a schedule bill (SCHEDINV mode only) for a population of students, you have the option to choose if students are selected with or without regard to whether the student is registered for the term. When running a a schedule bill (SCHEDSTMT mode) for a population of students, only students registered for the term (or enrollment period term) are selected.

When running schedule bills in mass, only students registered for the term (or enrollment period term) are selected; for example, an enrollment term header record (SFBETRM) must exist.

Single ID

To produce a schedule/bill invoice for an individual (single ID):

- Enter a valid ID in the ID Number parameter.

- Leave the population selection parameters blank.

When the ID Number parameter is populated, only schedule/bill invoices are produced, without regard to run mode. For example:

- If run mode entered is Schedinv or SchedStmt, only schedule/bill invoices are produced.

Note that a schedule/bill invoice will be produced without regard to whether the student is registered for the term.

Population Selection

To produce schedule/bill invoice or schedule/bill statement for a *group of students*:

- Enter a valid population defined by entering Selection Identifier, Application Code, Creator ID, and User.

- Leave the ID parameter blank.

When running a schedule bill (SCHEDINV mode only) for a population of students, you have the option to choose if students are selected with or without regard to whether the student is registered for the term.

When running a schedule bill (SCHEDSTMT mode) for a population of students, only students registered for the term (or enrollment period term) are selected.

Mass Mode

To produce a schedule/bill invoice or schedule/bill statement for all students, leave the following parameters blank:

- ID Number,

- Selection Identifier,

- Application Code,

- Creator ID, and

- User.

When running schedule bills in mass, only students registered for the term (or enrollment period term) are selected; for example, an enrollment term header record (SFBETRM) must exist.

E-bill Functionality

When you run TSRSBIL in SCHEDSTMT modes, a unique statement number is generated for each bill. This statement number is stored in the Statement Header Table as `tbbstmt_stmt_number` and prints in the statement output. The statement may be stored in order to be able to retrieve a copy using the Luminis Statement Channel, Self-Service, or the Statement and Payment History Inquiry Form (TGISTMT). For information about storing individual statements, please refer to the FAQ section in the Accounts Receivable TRM Supplement.

The statement number appears in the billing output, as follows:

- In SCHEDSTMT mode, the statement number appears on line 58 (unless the value of the `BLANK_PAPER_BOTTOM_TOTALS_START_LINE` has been modified in the TSRSBIL source code). The column in which it begins is dependent on the width of the schedule bill, but will be aligned to the beginning of the Student ID literal in the next line of the payment stub. The width varies with the choices made for columns to display on TSASBRL.

- In SCHEDINV mode, values from the statement number sequence are used during processing that are subsequently deleted from the TBBSTMT table. As a result, there will be gaps in the values that are in the `tbbstmt_stmt_number` column.

Refer to Article/FAQ: 000006682 (1-IHS99) : Issue: How do I store statements for use with AR eBill?

Attached to the Article/FAQ is an example syntax to parse the `tsrsbil.lis` file as well as the SQLPLUS script to update the `tbbstmt` data after the `tsrsbil` file has been parsed. The attachments are:

1. FAQ for eBill

    Multiple questions/answers related to eBill processing.

2. `parse_rbil.pl`

    Example of a perl script that can be used to perform parsing of TSRRBIL Regular Bill output.

3. `parse_sbil.pl`

    Example of a perl script that can be used to perform parsing of TSRSBIL Schedule Bill output.

4. `load_stubill.sql`

    Example of pl/sql script for storing the statement files using `tb_statement` API.

Also see FAQ 1-IPPO9 for specifics related to Evisions processing with eBill.

Include Zero Balances Parameter

There are three valid values for this parameter.

- *C* - Include all zero balances with activity since the last statement date.

- *Y* - Include all zero balances.

- *N* - Exclude all zero balances.

The value chosen for this parameter determines the accounts for which bills will be generated, as summarized in the following charts.

Chart 1 - Sample Accounts

	Account 1	Account 2	Account 3	Account 4
Previous Balance	N/A	0.00	0.00	200
Current Activity[1]	none	none	100.00	-200
Account Balance	0.00	0.00	-100.00	0.00

[1.] *Your database may include old transaction records which would appear to be Current Activity since* `tbraccd_bill_date` *and* `tbraccd_due_date` *are null. You may want to update these columns on long closed accounts before implementing the (C)urrent activity parameter option for zero balances.*

Chart 2 - Impact of Include Zero Balance Parameter on Output

Parameter Options	Account 1	Account 2	Account 3	Account 4
N (exclude all zero balances)	Not Printed	Not Printed	Not Printed	Not Printed
C (include zero balances only if current activity)	Not Printed	Not Printed	Printed	Printed
Y (include all zero balances)	Not Printed	Not Printed, Mass mode Printed, if included in Population Selection	Printed	Printed

> **Note:** The value for the Zero Balance Parameter can override the Minimum Balance parameter.

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Parameter	Name	Required?	Descriptions	Values
01	Term	Y	Process term code This code is used by the system to identify contract, exemption rules and deposits to be included in processing if the Create Cont, Dep, Expt Credits parameter is set to Y. It will also be used to identify financial aid and memos for the bill run.	Term Code Validation Form (STVTERM)
02	Address Selection Date	Y	Date used to find active address, entered in DD-MON-YYYY format.	
03	Address Type Hierarchy	Y	Enter the address type to be printed on the invoice/ statement. Multiple requests are permitted and must be entered in priority sequence. For example, 1MA 2PR will first print the mailing address, and if none is found, will print the permanent address.	Address Type Code Validation Form (STVATYP)
04	ID Number	N	If an ID number is entered, the process will only produce invoices. If the Run Mode is SCHEDSTMT then this parameter may *not* be populated.	ID Number - The number for which the invoice is to be produced. blank - Process all accounts or process a specified population.

Parameter	Name	Required?	Descriptions	Values
05	Printer	N	Indicate the printer destination for this process for NOSLEEP processing. If you requested a printer through the Account Printer Selection Form (TOADEST), the TOADEST printer is used. If TOADEST printer is null, then the printer value entered is used.	Printer Validation (GTVPRNT)
06	Selection Identifier	N	Enter the code that identifies the population with which you wish to work. The selection identifier must be defined on the Population Selection Inquiry Form (GLISLCT). All or none of the population selection parameters must be entered.	
07	Application Code	N	Enter the code that identifies the general area for which the selection identifier was defined. All or none of the population selection parameters must be entered. The Population Selection Extract Inquiry Form (GLIEXTR) may be used to review the people who will be processed.	Application Inquiry Form (GLIAPPL)
08	Creator ID	N	Enter the user ID of the person creating the sub-population rules. The creator ID must have been specified when defining the selection identifier. All or none of the population selection parameters must be entered.	
09	User	N	ID of the person who ran the population selection.	

Parameter	Name	Required?	Descriptions	Values
10	NOSLEEP Default Bill Format	Y	Enter 1 for Regular Bill invoice format. Enter 2 for Schedule Bill invoice format. **Note:** This parameter exists on both the TSRRBIL and TSRRBIL processes. The value entered in this parameter should match the value entered in the NOSLEEP Default Bill Format parameter of TSRSBIL. This value determines whether you are running NOSLEEP invoices or NOSLEEP schedule invoices when requesting invoices online for insert into the collector table (TBRCBRQ).	*1* Regular invoice produced in NOSLEEP mode (default) *2* Schedule Bill invoice produced in NOSLEEP mode
11	Schedule/Bill Rules Code	Y	Enter the rule code from Schedule/Bill Rules Form (TSASBRL).	Schedule Bill Rules Code Validation form (TTVSBRC)
12	Campus Code(s) (% valid)	N	Enter the campus code for schedule/bill selection. A schedule/bill is produced for students meeting all the selection criteria at the specified campus(es). Multiple values may be entered, or enter % for all.	Campus Code Validation form (STVCAMP)

Parameter	Name	Required?	Descriptions	Values	
13	Update Accept Charges	Y	For standard (non-enrollment period) bill outputs, this parameter updates the Accept Charges indicator when credits are posted to the student's account. For enrollment period bill outputs, this parameter updates the Accept Charges indicator for all terms in the student's enrollment period for which credits are posted. This parameter applies to SCHEDSTMT mode and APPLYCRED mode.	*Y*	Sets the AR indicator in registration (SFBETRM) and location management (SLRRASG, SLRMASG, SLRPASG)
				N	Do not update accept charges flags
14	Run Mode	Y	Choose one of three run modes: A schedule bill is a combination of a student's schedule of classes and their charges and credits. SCHEDINV - prints a student schedule and invoice of term charges and payments/credits. SCHEDSTMT - prints a student schedule and statement of term charges and payments/credits, and updates bill/due dates in the Account/Charge Payment Detail Table (TBRACCD). APPLYCRED - calculates and applies credits for contracts, exemptions, and deposits, but will not produce a bill.	*SCHEDINV* (default) *SCHEDSTMT* *APPLYCRED*	

Parameter	Name	Required?	Descriptions	Values	
15	Include Enrollment Period Bill	Y	A value of *Y* invokes enrollment period processing using the Term parameter to determine if multi-term periods exist. • If multi-term enrollment periods exist, for each student selected for billing, the process will determine if the student belongs to one of the multi-term enrollment periods. • If the student belongs to one of the multi-term enrollment periods, the process will print the new enrollment period bill format for that student. A value of *N* does not invoke enrollment period processing. As a result, bills print in the Standard (non- enrollment period) format. This parameter is used in SCHEDINV and SCHEDSTMT run modes. **Note:** This parameter is only functional if Banner Financial Aid is installed at your institution.	*Y*	Include enrollment period bills in bill run
				N	Do not include enrollment period bills in bill run (default)

Parameter	Name	Required?	Descriptions	Values
16	Billing Date	Y	This date will be used to determine what transactions are current based on the effective date, and will update the Bill Date of the transaction. Standard (non enrollment period) Schedule bills also use this date, if the **Current Due Cutoff Date** is not populated on TSASBRL. Enrollment period schedule bills also use this date if the "Enrollment Period Dates by Term" cutoff date is not populated on TSASBRL for the enrollment period run term.	Any valid date in DD-MON-YYYY format. The default is sysdate.
17	Due Date	Y	Due Date used for schedule/bills and to update the due date of the transaction. Enrollment period schedule bill modes use this date when the "Multiple Due Dates Exist" parameter is set to Y and the "Enrollment Period Dates by Term" due date is not populated on TSASBRL for the enrollment period run term.	Any valid date. The Due Date must be equal to or greater than the Bill Date.

Parameter	Name	Required?	Descriptions	Values	
18	Multiple Due Dates Exist	N	If enrollment period processing is invoked, a value of Y means the process will fetch the Due Date from TSASBRL for the matching term entered in the Enrollment Period Dates by Term section. This is the Due Date used for schedule/bills to update the due date of the transaction.	Y	Multiple due dates exist
			A value of N means the process uses the value entered in the Due Date parameter at run time to update the due date of the transaction.	N	Multiple due dates do not exist (default)
			This parameter is used in SCHEDINV and SCHEDSTMT run modes for schedule/bills printed in the enrollment period format.		

Parameter	Name	Required?	Descriptions	Values	
19	Create Cont, Dep, Expt Credits	Y	The process can be run for standard (non-enrollment period) output or enrollment period bill output. If the Include Enrollment Period Bill parameter is set to N and the Create Cont, Dep, Expts Credits parameter is set to Y, then: • When run in SCHEDINV mode, contract and exemption credits are estimated for run term • When run in SCHEDSTMT mode, contract and exemption credits are processed and deposits are released for run term If the Include Enrollment Period Bill parameter is set to Y and the Create Cont, Dep, Expts Credits parameter is set to Y, then: • When run in SCHEDINV mode, contract and exemption credits are estimated for all terms in the student's enrollment period. • When run in SCHEDSTMT mode, contract and exemption credits are processed and deposits are released for all terms in the student's enrollment period.	Y	(default) estimates or calculates credits
				N	No estimates or calculations

Parameter	Name	Required?	Descriptions	Values	
20	Include Zero Balances	Y	The Include Zero Balance parameter includes three valid values. This makes it possible for the institution to bill accounts with activity that nets to zero and to avoid billing accounts with no activity. Minimum Account Balance refers to current due account balance. If option C is selected and the only activity on the account is future dated, the account will not be billed if the Print Future Detail Ind is set to N. **Note:** The value entered here is overridden by the value entered for the Include Zero Balance parameter.	N	Exclude all zero balances.
				C	Include zero balances only if there was activity on the account
				Y	Include all zero balances
21	Print a control report	N	For details, see the Values column.	Y	Print control report (default)
				N	Do not print control report
22	Print expanded address for	Y	For details, see the Values column.	1	Window envelope
				2	Non-window envelope
				3	None

Parameter	Name	Required?	Descriptions	Values	
23	Exclude Campus from Sort	Y	Specify whether to exclude campus as the primary sort/print order for the output **Note:** Bills for which there are no valid address will be printed first, followed by bills with addresses.	Y	Bills sort and print based on the print order specified on the Schedule Bill Rules form (TSASBRL).
				N	Bills sort and print by campus first, then based on the print order specified on the Schedule Bill Rules form (TSASBRL).
24	Students not registered Ind	N	This parameter provides the option to produce schedule invoices without regard to whether the student is registered i.e., enrollment term record (SFBETRM) exists. **Note:** This parameter applies only for schedule invoice mode (SCHEDINV) when run with a population selection.	Y	Students in the population selection are not required to be registered to be selected for billing when run in SCHEDINV mode.
				N	Students in the population selection are required to be registered to be selected for billing when run in SCHEDINV mode.

Parameter	Name	Required?	Descriptions	Values	
25	Exclude Future Term Ind	N	This parameter provides the option to include all future term activity in the Future balance calculation without regard to the effective date of the transaction. **Note:** For enrollment period bills, future term means future terms that are not a term in the student's enrollment period.	Y	Future term transactions are added to the Future Balance, without regard to the effective date of the transaction.
				N	Future term transactions are added to either the Previous/ Other Term calculation or the Future Balance calculation, based on the effective date of the transaction. For example:
					• If the effective date of the future term transaction is less than or equal to the cutoff date, the transaction is added to Previous/Other Term balance calculation.
					• If effective date of the future term transaction is greater than the cutoff date, the transaction is added to Future balance calculation.

Parameter	Name	Required?	Descriptions	Values	
26	Minimum Acct Balance	Y	Enter minimum balance required for account to be billed. You can request schedule invoices and schedule statements for accounts with a minimum balance, and use negative numbers to retrieve accounts with a credit balance. **Note:** Minimum Account Balance refers to current due account balance. The value entered here is overridden by the valued entered for the Include Zero Balance parameter.		
27	Update Accept Charges - Fin Aid	Y	For standard (non-enrollment period) bill outputs, this parameter updates the Accept Charges indicator if Financial Aid disbursements exist on the student's account for the run term.	Y	Sets the AR indicator in registration (SFBETRM) and location management (SLRRASG, SLRMASG, SLRPASG)
			For enrollment period bill outputs, this parameter updates the Accept Charges indicator for all terms in the student's enrollment period if Financial Aid disbursements exist on the student's account for any term in the student's enrollment period. This parameter applies to SCHEDSTMT mode and APPLYCRED mode.	N	Do not update accept charges flags

Student Schedule Bill Enhancement - Technical

New Package

The following package is new for this release.

Procedures and Functions for Billing Processes (TSKBILL)

This new package stores procedures and functions for the new billing processes. The following objects are new:

- **tskbill.sql**

- **tskbill1.sql**

Package procedures are called by TSRSBIL and TSRRBIL.

Procedures Added in this Package

Procedure	Description
`p_apply_credit_all_terms`	Heading routine called by TSRSBIL and TSRRBIL for the application of credits for all terms for fetched PIDM.
`p_apply_credits`	Internally called by `p_apply_credit_all_terms` and it is main macro for release of exemption, contracts, and deposits. Parameter indicators determine if credits and/or financial aid will be processed in this run and processing order for contracts and exemptions. The `UPD_AR_INDS` is processed when deposits or contract/exemptions are posted to the TBRACCD table.
`p_delete_depo_memos`	Deletes from TBRMEMO.
`p_process_deposit`	Implements `tb_deposit.p_release`.
`p_build_extract_cursor_string`	Dynamically builds the statement to select PIDMs, with receivable information to support processing decisions.
`p_build_process_cursor_string`	Builds selection from TBBSTMT dynamically in `build_process_cursor_string` to set sorts, used as driver for the production of the bills.
`p_upd_ar_inds`	Updates AR indicators when deposits or contract/exemptions are posted to the TBRACCD table.
`p_ins_tbbstmt`	Inserts the record to statement header table for processing.
`p_del_tbbstmt`	Purges statement header. When in an update mode we leave the TBBSTMT records which may be associated to a saved file and used to display statements. When not in an update mode we purge the records after using them for sort and print of invoices.
`p_upd_tbbstmt`	Updates statement header.
`p_calc_amount_due`	Calculates amount due. Currently called by TSRRBIL.
`p_calc_othmemo_affct_amount`	Calculates Other amount due. Called by TSRRBIL.
`p_calc_finaidmemo_affct_amount`	Calculates Finaid amount due. Called by TSRRBIL.

Procedure	Description
`p_calc_past_due`	Calculates past due. Called by TSRRBIL.
`p_get_prev_chg_amt`	Sums the previous billed charges. Used in TSRRBIL.
`p_get_prev_pay_amt`	Sums the previous billed payments. Used in TSRRBIL.
`p_calc_memo_affct_amount`	Calculates pre-authorized credits' effect on total due. Used in TSRRBIL.
`p_sel_details_curr`	Gets all current charges and payments for PIDM being processed.
`p_sel_details_future`	Gets all future charges and payments for PIDM being processed TSRRBIL
`p_sel_future_cc`	Gets all future charges and payments for PIDM being processed, but convert to foreign currency.
`p_sel_memos_faid`	Fetches record for MEMOED FINANCIAL AID section.
`p_sel_memos`	Section will have records with source code not as C, D and E. Plus 'F' only if it doesn't belong to this term in case of Non-EP bill and not for any terms in an EP in case of EP bill.
`p_sel_spec_memos`	Gets pre-authorized credits for entity being billed.
`p_sel_fut_deposits`	Processes deposits for third party. Any auto release deposits will already have been released in the credit portion of this report. This select will grab any ones left over.
`p_selpers`	Selects the name prefix/suffix and deceased indicator from person
`p_getpidm`	Gets PIDM for individual account run.
`p_getpidm2`	Helps in preventing run for ID which is 3rd party or has all 'ARTERM' entries.
`p_get_conv_rate`	Fetches currency conversion rate.
`p_validate_curr_code`	Populates currency title, needed for the foreign currency message.
`p_determine_eff_date`	Formats Bill Date to effective date time.
`p_dc_futures_date`	Formats Future Date.
`p_del_parms_fcn`	Deletes records from GJBPRUN after fetching all jobsub parameters.

Functions Added in this Package

Function	Description
get_gubinst_info	Fetches Institution details from GUBINST.

Changed Packages

The following packages have been changed.

Package Called Job Submission to Validate AR Parameters (TOKPVAL)

tokpval.sql

New procedures added for TSRRBIL and TSRSBIL jobsub parameter validations.

- P_VALID_POPSEL_PARM_TSRRBIL

- P_VALID_TSRRBIL_PARMS

- P_VALID_POPSEL_PARM_TSRSBIL

- P_VALID_TSRSBIL_PARMS

tokpva1.sql

New procedures added for TSRRBIL and TSRSBIL jobsub parameter validations.

- P_VALID_POPSEL_PARM_TSRRBIL

- P_VALID_TSRRBIL_PARMS

- P_VALID_POPSEL_PARM_TSRSBIL

- P_VALID_TSRSBIL_PARMS

Seed Data

Script	Result
`tgjbjobsi_080500`	Insert new/modified GJBJOBS records for TSRSBIL and TSRRBIL.
`tgjbpdefi_080500`	Insert new jobsub parameter for TSRRBIL, TSRSBIL.
`tgjbpdfti_080500`	Insert new jobsub parameter in GJBPDFT for TSRRBIL, TSRSBIL.
`tgjbpvali_080500`	Insert new jobsub parameter in GJBPVAL for TSRRBIL, TSRSBIL.
`tgobfeobi_080500`	Insert in GOBFEOB
`tgubobjsi_080500`	Add new objects in GUBJOBS - TSRSBIL and TSRRBIL

NOSLEEP Enhancement - Functional

Overview

NOSLEEP Triggers is an alternative processing method to sleep/wake processing. Placing a trigger on an associated collector table allows you to run the desired process on demand. The following Banner Accounts Receivable billing processes use the NOSLEEP trigger processing in place of sleep/wake processing:

Report/Process	Description
TSRRBIL	Student Regular Bill Statement
TSRSBIL	Student Schedule Bill Statement

Users may request an invoice online using an application form or batch process to create a request for output that can be generated by NOSLEEP processing. When a user requests an invoice online, the invoice (or schedule invoice) is placed into the TBRCBRQ collector table. When NOSLEEP processing is on, the invoice (or schedule invoice) is immediately processed and sent to the designated printer.

NOSLEEP triggers processing eliminates excessive redo log/archival log activity associated with sleep/wake processing, saving significant archive log disk space (as well as reducing the number of archived logs that would be required for a database restore). Both Banner General and Banner Accounts Receivable segments of NOSLEEP Triggers must be installed in order to use NOSLEEP Student Billing triggers functionality.

The implementation of NOSLEEP Triggers is not mandatory.

Prerequisites for TSRRBIL and TSRSBIL NOSLEEP Processing

As mentioned in the above Overview section, both the Banner General and Banner Accounts Receivable segments of NOSLEEP Triggers must be installed in order to have the functionality of NOSLEEP Triggers available to you to use the NOSLEEP Student Billing triggers.

The General segment of NOSLEEP Triggers is comprised of the infrastructure that supports using NOSLEEP Triggers functionality. Database package additions and changes in addition to supporting "seed" data.

Refer to the *Banner General Technical Reference Manual* for information on the contents, installation, and usage of the General segment of NOSLEEP Triggers. Information on NOSLEEP Triggers can be found in the Reports in Banner General chapter.

Setting Up NOSLEEP Processing for TSRRBIL and TSRSBIL

1. On the Crosswalk Validation form (GTVSDAX):

   1.1. Enable NOSLEEP for Billing

   The External Code is delivered as N where

   – Internal Code = STUBILL and

   – Internal Code Group = NOSLEEP.

   To turn NOSLEEP processing on, set the External Code to Y.

   1.2. Set the Printer Form for Billing

   The External Code is delivered as PORTRAIT where

   – Internal Code = STUBILL_FM and

   – Internal Code Group = NOSLEEP.

   If you use a "Special Print" format, you may change the delivered value from "Portrait" to the "Special Print" value.

2. Verify that the Oracle user ID NOSLEEP exists to each of the billing processes you want to run in NOSLEEP, for example, TSRRBIL or TSRSBIL.

3. For the NOSLEEP user id, create the parameter set "*NOSLEEP*" *(GJBPDFT_JPRM_CODE = NOSLEEP)* for each of the student billing processes you want to run (TSRRBIL/TSRSBIL).

4. Institution level NOSLEEP default parameter values:

   Create the institution level parameter values for the NOSLEEP user ID where *GJBPDFT_JPRM_CODE = NOSLEEP* for each of the student billing process you want to run (TSRRBIL/TSRSBIL).

   Note: Bill format can be an invoice (TSRRBIL) or a schedule invoice (TSRSBIL). Specify the default bill format by setting the *NOSLEEP Default Bill Format* parameter in TSRRBIL and TSRSBIL to the same value. See "How is Bill Format Determined?" on page 66 for information.

5. User level NOSLEEP default parameter values:

   Individual users can create their own user default parameter values for each of the student billing processes you want to run (TSRRBIL/TSRSBIL). If user defaults exist, NOSLEEP processing fetches user defaults for the following parameters and uses these values to produce the invoice (or schedule invoice).

   • Term Code, if form from which invoice is requested does not have a term in the keyblock.

   • Printer, if TOADEST is null.

   • NOSLEEP Default Bill Format.

> **Note:** Bill format can be an invoice (TSRRBIL) or a schedule invoice (TSRSBIL). Specify the default bill format by setting the NOSLEEP Default Bill Format parameter in TSRRBIL and TSRSBIL to the same value. See "How is Bill Format Determined?" on page 66 for information.

NOSLEEP Processing Parameter Value Hierarchy

NOSLEEP processing parameter defaults can be set at the institutional level, user level, or both.

The NOSLEEP trigger will fetch the default billing values as noted below.

- ID (PIDM)

  The ID is the student account for which an invoice or schedule invoice is being requested. The ID is fetched from form on which the invoice was requested.

- Term

  - Term is fetched from the form where invoice was requested, if exists in form keyblock.

  - If form keyblock does not have a term code, then term is fetched from the user default for selected process, if exists.

  - If the user default *Term* parameter is null, then term is fetched from the NOSLEEP user default for the selected process.

- Printer

  - Printer is fetched from the Invoices field on the System Distribution Initialization Information Form (SOADEST or TOADEST) for the user requesting the invoice, if exists.

  - If the printer is null on SOADEST/TOADEST, then Printer is fetched from the user default for the selected process, if exists.

  - If the user default *Printer* parameter is null, then printer is fetched from the NOSLEEP user default for the selected process.

- NOSLEEP Default Bill Format

  Bill format can be an invoice (TSRRBIL) or a schedule invoice (TSRSBIL).

  - Users specify their default bill format by setting the NOSLEEP Default Bill Format parameter in TSRRBIL and TSRSBIL to the same value.

    – If the parameter value is set to 1 for both TSRRBIL and TSRSBIL, an invoice is produced.

    – If the parameter value is set to 2 for both TSRRBIL and TSRSBIL, a schedule invoice is produced.

  - If the user default for *NOSLEEP Default Bill Format* parameter is null (or cannot be determined), then *NOSLEEP Default Bill Format* is fetched from the NOSLEEP user default for the selected process.

See "How is Bill Format Determined?" on page 66 for more detailed information on bill format.

All other parameter values are fetched from NOSLEEP user defaults for the selected process.

> **Note:** NOSLEEP user default values are fetched from the default parameters where the parameter set = NOSLEEP for the selected process.

NOSLEEP Default Bill Format Preference

The bill format determines whether NOSLEEP processing produces an INVOICE (using TSRRBIL) or a SCHEDULE INVOICE (using TSRSBIL). When an invoice is requested online NOSLEEP processing needs to know what type of bill to produce; an invoice or a schedule invoice. Both TSRRBIL and TSRSBIL have a parameter called "NOSLEEP Default Bill Format". This parameter is used by NOSLEEP processing to determine the institutional preference or individual user's preference for which bill format to produce when requesting an invoice online.

Bill Format Preferences

Default bill format preference can be set up at the institutional level, user level, or both.

If default bill format is set at the institutional level only, then NOSLEEP processing will produce bills in the format specified by the NOSLEEP user ID parameter default.

If users specify a default bill format, then NOSLEEP processing will produce bills in the format specified by the user's parameter default, first. If the user's preference for bill format cannot be determined, then NOSLEEP processing will use the institutional level default and produce bills in the format specified by the NOSLEEP user ID parameter default.

Bill Format – User Preferences Setup

Bill format preference can be set up at the user level, if desired. If a user has specified a default bill format, then NOSLEEP processing will produce bills in the format specified by the user's parameter default.

When a user's defaults for the NOSLEEP Default Bill Format parameter are blank in TSRRBIL and TSRSBIL or cannot be determined, NOSLEEP processing uses the NOSLEEP user defaults for the parameter set "NOSLEEP" to determine the bill format.

Invoice Format Only

If you only produce bills in the invoice format, enter the value 1 in the NOSLEEP Default Bill Format parameter for the Student Regular Bill Statement process (TSRRBIL). You may either leave the Student Schedule Bill Statement process (TSRSBIL) NOSLEEP Default Bill Format parameter blank or enter a value of 1.

Schedule Invoice Format Only

If you only produce bills in the schedule invoice format, enter the value 2 in the NOSLEEP Default Bill Format parameter for the Student Schedule Bill Statement process (TSRSBIL). You may either leave the Student Regular Bill Statement process (TSRRBIL) NOSLEEP Default Bill Format parameter blank or enter a value of 2.

Both Invoice and Schedule Bill Formats

If you sometimes produce bills in the invoice format and schedule invoice format, you will need to modify your user defaults as needed based on the type of bill you want to produce.

To produce a bill in an invoice format, enter the value 1 in the NOSLEEP Default Bill Format parameter for both TSRRBIL and TSRSBIL.

To produce a bill in a schedule invoice format, enter the value 2 in the NOSLEEP Default Bill Format parameter for both TSRRBIL and TSRSBIL.

Bill Format – NOSLEEP User Preferences Setup

You may also set up bill format preference at the institution level, rather than the user level. To do so, each user running the process would leave the NOSLEEP Default Bill Format parameter blank for both TSRRBIL and TSRSBIL.

When a user's defaults for the NOSLEEP Default Bill Format parameter are blank in TSRRBIL and TSRSBIL, NOSLEEP processing uses the NOSLEEP user defaults for the parameter set "NOSLEEP" to determine the bill format.

Invoice Format Only

If your institution only produces bills in the invoice format, enter the value 1 in the NOSLEEP Default Bill Format parameter for the Student Regular Bill Statement process (TSRRBIL). You may either leave the Student Schedule Bill Statement process (TSRSBIL) NOSLEEP Default Bill Format parameter blank or enter a value of 1.

Schedule Invoice Format Only

If your institution only produces bills in the schedule invoice format, enter the value 2 in the NOSLEEP Default Bill Format parameter for the Student Schedule Bill Statement process (TSRSBIL). You may either leave the Student Regular Bill Statement process (TSRRBIL) NOSLEEP Default Bill Format parameter blank or enter a value of 2.

Both Invoice and Schedule Bill Formats

If your institution sometimes produce bills in the invoice format and schedule invoice format, you will need to modify your user defaults as needed based on the type of bill you want to produce.

To produce a bill in an invoice format, enter the value 1 in the NOSLEEP Default Bill Format parameter for both TSRRBIL and TSRSBIL.

To produce a bill in a schedule invoice format, enter the value 2 in the NOSLEEP Default Bill Format parameter for both TSRRBIL and TSRSBIL.

> **Note:** If at user level, a value is entered in the Bill Format parameter of either TSRRBIL or TSRSBIL and the Bill Format parameter of the other report is null, NOSLEEP processing will print the report which has Bill format entered, without regard to the value enter in the BILL Format parameter. For example – if Bill format was entered as '2' for TSRRBIL and Bill format is null for TSRSBIL, NOSLEEP processing will assume users intent is to print an invoice using TSRRBIL.
>
> If user erroneously enters different values for Bill format in USER level default, it ignores values and looks at the NOSLEEP user Default Bill Format parameter values.

How is Bill Format Determined?

This section shows how NOSLEEP processing determines the bill format produced when a user requests an invoice online. Various setup scenarios are displayed along with the resulting bill format.

User Default (GJBPDFT)

Scenario 1			
If user defaults exist for both of the processes, and the value is the same, then use process with defaults.	TSRRBIL	TSRSBIL	Bill Format used
Parameter 10 - NOSLEEP Default Bill Format	1	1	TSRRBIL - Invoice
Scenario 2			
If user defaults exist for both of the processes, and the value is the same, then use process with defaults.	TSRRBIL	TSRSBIL	Bill Format used
Parameter 10 - NOSLEEP Default Bill Format	2	2	TSRSBIL - Schedule Invoice
Scenario 3			
If user defaults exist for both of the processes, and the value is not the same, then go to NOSLEEP user defaults	TSRRBIL	TSRSBIL	Bill Format used
Parameter 10 - NOSLEEP Default Bill Format	1	2	Cannot determine user default --> look at NOSLEEP user default
Scenario 4			
If user defaults exist for both of the processes, and the value is not the same, then go to NOSLEEP user defaults	TSRRBIL	TSRSBIL	Bill Format used
Parameter 10 - NOSLEEP Default Bill Format	2	1	Cannot determine user default --> look at NOSLEEP user default

Scenario 5			
If user defaults only exist for one of the processes, then use process with defaults.	TSRRBIL	TSRSBIL	Bill Format used
Parameter 10 - NOSLEEP Default Bill Format	1	null	TSRRBIL - Invoice
Scenario 6			
If user defaults only exist for one of the processes, then use process with defaults.	TSRRBIL	TSRSBIL	Bill Format used
Parameter 10 - NOSLEEP Default Bill Format	2	null	TSRRBIL - Invoice
Scenario 7			
If user defaults only exist for one of the processes, then use process with defaults.	TSRRBIL	TSRSBIL	Bill Format used
Parameter 10 - NOSLEEP Default Bill Format	null	1	TSRSBIL - Schedule Invoice
Scenario 8			
If user defaults only exist for one of the processes, then use process with defaults.	TSRRBIL	TSRSBIL	Bill Format used
Parameter 10 - NOSLEEP Default Bill Format	null	2	TSRSBIL - Schedule Invoice
Scenario 9			
If user defaults do not exist for either of the processes, then go to NOSLEEP user defaults	TSRRBIL	TSRSBIL	Bill Format used
Parameter 10 - NOSLEEP Default Bill Format	nul	null	User default does not exist — look at NOSLEEP user default

NOSLEEP User Default for NOSLEEP Parameter Set (GJBPDFT)

When user defaults do not exist or the bill format cannot be determined, NOSLEEP processing will look at NOSLEEP user defaults to determine the bill format.

Scenario 10			
If NOSLEEP user defaults exist for both of the processes, and the value is the same, then use process with defaults.	TSRRBIL	TSRSBIL	Bill Format used
Parameter 10 - NOSLEEP Default Bill Format	1	1	TSRRBIL - Invoice
Scenario 11			
If NOSLEEP user defaults exist for both of the processes, and the value is the same, then use process with defaults.	TSRRBIL	TSRSBIL	Bill Format used
Parameter 10 - NOSLEEP Default Bill Format	2	2	TSRSBIL - Schedule Invoice
Scenario 12			
If NOSLEEP user defaults exist for both of the processes, and the value is not the same, then code defaults to RBIL	TSRRBIL	TSRSBIL	Bill Format used
Parameter 10 - NOSLEEP Default Bill Format	1	2	TSRRBIL - Invoice
Scenario 13			
If NOSLEEP user defaults exist for both of the processes, and the value is not the same, then code defaults to RBIL	TSRRBIL	TSRSBIL	Bill Format used
Parameter 10 - NOSLEEP Default Bill Format	2	1	TSRRBIL - Invoice
Scenario 14			
If NOSLEEP user defaults only exist for one of the processes, then use process with defaults.	TSRRBIL	TSRSBIL	Bill Format used
Parameter 10 - NOSLEEP Default Bill Format	1	null	TSRRBIL - Invoice

Scenario 15			
If NOSLEEP user defaults only exist for one of the processes, then use process with defaults.	TSRRBIL	TSRSBIL	Bill Format used
Parameter 10 - NOSLEEP Default Bill Format	2	null	TSRRBIL - Invoice
Scenario 16			
If NOSLEEP user defaults only exist for one of the processes, then use process with defaults.	TSRRBIL	TSRSBIL	Bill Format used
Parameter 10 - NOSLEEP Default Bill Format	null	1	TSRSBIL - Schedule Invoice
Scenario 17			
If NOSLEEP user defaults only exist for one of the processes, then use process with defaults.	TSRRBIL	TSRSBIL	Bill Format used
Parameter 10 - NOSLEEP Default Bill Format	null	2	TSRSBIL - Schedule Invoice
Scenario 18			
If NOSLEEP user defaults do not exist for either of the processes.	TSRRBIL	TSRSBIL	Bill Format used
Parameter 10 - NOSLEEP Default Bill Format	null	null	NA - Bill format cannot be determined based on setup. No Bill is produced.

Changed Forms

The following forms have been modified.

Account Detail Review Form – Student (TSAAREV)

A new trigger `PRINT_BILL_NOSLEEP` and `PRINT_BILL_TSRCBIL` was created and is called based on the NOSLEEP setup.

When a user selects "Request Invoice" from the options menu, the applicable trigger `PRINT_BILL_NOSLEEP` or `PRINT_BILL_TSRCBIL` is called based on the NOSLEEP setup.

Foreign Currency Detail Form – Student (TSADETF)

A new trigger `PRINT_BILL_NOSLEEP` and `PRINT_BILL_TSRCBIL` was created and is called based on the NOSLEEP setup.

When a user selects "Request Invoice" from the options menu, the applicable trigger `PRINT_BILL_NOSLEEP` or `PRINT_BILL_TSRCBIL` is called based on the NOSLEEP setup.

Student Account Detail (TSADETL)

A new trigger `PRINT_BILL_NOSLEEP` and `PRINT_BILL_TSRCBIL` was created and is called based on the NOSLEEP setup.

Changes done for NOSLEEP. New trigger `PRINT_BILL_NOSLEEP` and `PRINT_BILL_TSRCBIL` created and is called based on the NOSLEEP setup.

Customer Service Inquiry (TSICSRV)

The Item/Duplicate menu function was disabled because this option does not have any functionality associated with it.

Changed Process

TSRCBIL

 Modified to display error if trying to run TSRCBII in sleepwake mode when NOSLEEP is on for TSRRBIL and TSRSBIL (for example, NOSLEEP indicator for STUBILL is set to Y on GTVSDAX).

NOSLEEP Enhancement - Technical

New Database Triggers

The following trigger is new.

TT_TBRCBRQ_NOSLEEP_AIR (tbtcbrq0.sql)

Table TBRCBRQ - After Insert Row

This trigger calls the Accounts Receivable `TOKNOSL.p_tbrcbrq_nosleep_air database` procedure. It passes the process to be run (TSRRBIL or TSRSBIL), the parameter number for the printer, the user to run the job on behalf of (NOSLEEP), the job parameter code value (NOSLEEP), and transaction values from the row being inserted (Printer, PIDM, Term).

Changed Package

The following package has been changed.

Package Procedures/functions Specific NOSLEEP (TOKNOSL)

toknosl0.sql

Procedure `p_tbrcbrq_nosleep_air` was added for NOSLEEP on TBRCBRQ for process TSRSBIL and TSRRBIL.

toknosl1.sql

Procedure `p_tbrcbrq_nosleep_air` added for NOSLEEP on TBRCBRQ for process TSRSBIL and TSRRBIL.

Seed Data

The following seed data script is included in this release.

Script	Result
`tgtvsdaxi_080500.sql`	1. Inserts a new GTVSDAX entry of INTERNAL GROUP "NOSLEEP" with INTERNAL CODE STUBILL. Set the External code to Y to turn on NOSLEEP processing for TSRRBIL and TSRSBIL. 2. Inserts a new GTVSDAX entry of INTERNAL GROUP "NOSLEEP" with INTERNAL CODE of "STUBILL_FM". The External Code is set to the format of PORTRAIT. **Note:** If you use a "Special Print" format, you may change the delivered value from "Portrait" to the "Special Print" value. 3. Inserts a new GTVSDAX entry of INTERNAL GROUP "NOSLEEP" with INTERNAL CODE "TSRSSUM_FM". This is to change the External Code default format originally delivered as PORTRAIT to LANDSCAPE for the NOSLEEP process TSRSSUM.

Post Install Considerations

The installation of NOSLEEP Triggers is done such that all NOSLEEP Trigger processing is delivered off. If you want to switch from a sleep/wake method of processing to a NOSLEEP Trigger method of processing, you need to turn off the sleep/wake for that specific process and then flip the GTVSDAX switch that controls the NOSLEEP Trigger for the specific process to Y.

For example, for TSRRBIL and TSRSBIL:

Set the switch to Y on the row that controls the logic in the NOSLEEP Trigger process for STUBILL. This row is in Table GTVSDAX. Column GTVSDAX_EXTERNAL_CODE is either Y (the logic in the trigger is enabled) or N (the logic in the trigger is dormant). The GTVSDAX switch for the STUBILL NOSLEEP Trigger process can be found using these GTVSDAX key column values:

GTVSDAX_INTERNAL_CODE_GROUP = 'NOSLEEP'

GTVSDAX_INTERNAL_CODE = 'STUBILL'

GTVSDAX_INTERNAL_CODE_SEQNO = 1

The installation of NOSLEEP Triggers is done such that if you encounter any errors when the triggers attempt to submit a job for processing, those errors will be recorded in the GURTKLR table (such that they can be viewed using the GUAMESG form). If you do not want these errors recorded the corresponding GTVSDAX table row for COLUMN GTVSDAX_EXTERNAL_CODE can be set to N.

This GTVSDAX row can be found using these GTVSDAX key column values:

GTVSDAX_INTERNAL_CODE_GROUP = 'NOSLEEP'

GTVSDAX_INTERNAL_CODE = 'DEBUG'

GTVSDAX_INTERNAL_CODE_SEQNO = 2

Miscellaneous Enhancements

This section describes miscellaneous functional enhancements included in the Release 8.5 of the Banner Accounts Receivable (AR) system.

Resolved Change Requests - Enhancements

Student Regular Bill Statement Process (TSRRBIL)

CR000113265 (IDEA-21264) – Streamline Student Bills

Requested Functionality

Streamline TSRCBIL into simpler interfaces that increase usability and minimize confusion.

Resolution

The student billing process (TSRCBIL) has been split into two new and separate processes. One of the new processes is specific to Student Regular Bill (TSRRBIL) and the other process is specific to Student Schedule Bill (TSRSBIL). The ability to apply credits exists within each of the two new processes. Institutions may use the process that better fits their business need.

CR000114532 (IDEA-14588) – Option To Update The Accept Charges Flag (AR Ind) When Disbursed Financial Aid Exists On The Student Account

Requested Functionality

Provide option to update accept charges flag if financial aid disbursements have already been posted to a student's account.

Resolution

Added a parameter to set the Accept Charges indicator to Y(es) if financial aid disbursements exist on the student's account for the run term (or enrollment period term in case of enrollment period bills).

CR000113266 (IDEA-13560) – Add New Report Section for "Other Finaid Memos"

Requested Functionality

Display non-run term/non-enrollment period term memoed financial aid in a separate section on the regular bill. Currently non-run term/non-enrollment period term memoed financial aid displays grouped with other memos in the "Memo Items" section of the invoice/statement.

Resolution

A new section called "Other Finaid Memo" was added to the invoice/statement. Non-run term/non-enrollment period term memoed financial aid now displays in this section of the regular bill (rather than the Memo Items section) when the option to 'Print Other Memos" is set to Y.

CR000114533 (IDEA-14438) – Display Due Date On Bill Without Regard To Bill Run Mode

Requested Functionality

Display Due Date on the regular bill when run in invoice mode. Currently, invoice mode is the only run mode that does not display Due Date.

Resolution

Due Date now displays on the regular bill when run in INVOICE mode. Although Due Date displays on the regular invoice, TSRRBIL will not update the due date field in TBRACCD until the process is run in STATEMENT mode.

Student Schedule Bill Statement Process (TSRSBIL)

CR000113265 (IDEA-21264) – Streamline Student Bills

Requested Functionality

Streamline TSRCBIL into simpler interfaces that increase usability and minimize confusion.

Resolution

The student billing process (TSRCBIL) has been split into two new and separate processes. One of the new processes is specific to Student Regular Bill (TSRRBIL) and the other process is specific to Student Schedule Bill (TSRSBIL). The ability to apply credits exists within each of the two new processes. Institutions may use the process that better fits their business need.

CR000114532 (IDEA-14588) – Option To Update The Accept Charges Flag (AR Ind) When Disbursed Financial Aid Exists On The Student Account

Requested Functionality

Provide option to update accept charges flag if financial aid disbursements have already been posted to a student's account.

Resolution

Added a parameter to set the Accept Charges indicator to Y(es) if financial aid disbursements exist on the student's account for the run term (or enrollment period term in case of enrollment period bills).

CR000113264 (IDEA-15742) – Allow Schedule Invoices To Be Run For A Population Selection Of Students Who Are Not Registered For The Term

Requested Functionality

Provide option to allow population selection to produce schedule invoices without regard to whether the student is registered, for example, has an enrollment term record (SFBETRM).

Resolution

Added a parameter option to bypass enrollment term record check when running Schedule Invoices for a population selection.

CR000113261 (IDEA-13917) – Option To Exclude Future Term Activity From The Previous/Other Term Bucket On Schedule Bills

Requested Functionality

Provide option to include activity for future terms in the Future Balance without regard to the effective date of the transaction.

Resolution

Added a parameter option to bypass effective date check and add all future term activity to the Future Balance.

CR000114530 (IDEA-16735) – Option To Display "Other" AR Memos On The Schedule Bill And Provide Option To Allow Other AR Memos To Affect Amount Due

Requested Functionality

Provide option to display all memos on the schedule bill.

Resolution

The following new indicators are now displayed on the Schedule/Bill Rules Form (TSASBRL):

- Print Other Memos Checkbox

  Other memos are all memos except Financial Aid memos (source F), Contract memos (source C) and Exemption memos (source E). Select the **Print Other Memos** checkbox to display other memos on the schedule bill. Clear this checkbox if you do not want Other Memos to display on the schedule bill.

  - For enrollment period schedule bill outputs, other memos print if the term matches a term in the student's enrollment period.

  - For standard (non-enrollment period) schedule bill outputs, other memos print if the term matches the run term (Term) parameter.

- Other Memos Affect Amount Due Checkbox

  This checkbox provides the option to indicate whether other memos displayed on the schedule bill affect the amount due. Select the **Other Memos Affect Amount Due** check box to have other memos affect amount due. Clear this check box to ensure that other memos will not affect amount due.

CR000114533 (IDEA-14438) – Provide Minimum Amount Due Option Without Regard To Bill Run Mode

Requested Functionality

Provide option to enter the minimum current due account balance for determining whether an account is selected when running schedule bills. Currently, only regular bill run modes (INVOICING/STATEMENT) have a minimum current due account balance option.

Resolution

Added a parameter option to enter the minimum account balance (i.e., the minimum current due account balance) required for an account to be selected for billing.

Resolutions

At the time this guide was completed, a set of Change Request resolutions (Enhancements and Defects) were targeted for delivery with this release. The Banner Accounts Receivable Resolution Report is a companion to this release guide. This Resolution Report (`Banner_Accounts_Receivable_Resolutions_Report_8`.5.txt) provides summary information about the Change Requests that are resolved in Banner Accounts Receivable 8.5.

For additional details about specific change requests, go to http://www.ellucian.com/Solutions/Ellucian-Client-Support/ and use the Ellucian Hub to access the Ellucian Support Center.