

# Banner Accounts Receivable Release Guide

*May 2006*

*Release 7.3*



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## Introduction

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This guide documents Release 7.3 of the Banner Accounts Receivable System. Release 7.3 includes enhancements, RPEs, and problem resolutions.

This document describes the following enhancements:

### *e-Bill Enhancement*

With the e-Bill enhancement, students and office staff will be able to access billing statements, payment history, and account activity since the last statement. Students and office staff will also be able to access a printable version of the statement output, once it has been stored.

### *Reconciliation Enhancement*

This enhancement includes changes to the Reconciliation Report (TGRRCON) that help users identify out-of-balance conditions, reflecting any amounts that have not yet been posted to the General Ledger. New views make data from multiple tables more accessible for reporting purposes.

### *New API*

Refer to the APIs section for information about the TB\_STATEMENT application programming interface (API) and supporting packages delivered with this release. This API is a database package that contains the validation rules and other related processing for the table associated with student bills.

### *Miscellaneous Enhancements*

Miscellaneous enhancements and RPEs delivered with this release are included in the Miscellaneous Enhancements section.

### *Problem Resolutions*

Problem resolutions are identified in the Problem Resolutions section, listed by module.

### *Frequently Asked Questions*

Appendix A contains a Frequently Asked Questions section, which includes guidance on questions you may encounter as you implement the e-Bill functionality to store and view statement files.

### *Sample PDF Statement*

Appendix B contains a sample of a PDF statement.

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# Section 1 e-Bill Enhancement - Functional

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## Overview

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This section includes information about the e-bill enhancement delivered with this release. With this enhancement, students and office staff can now access billing statements, payment history, and account activity since the last statement. Students and office staff will also be able to access a printable version of the statement output, once it has been stored. This information is available via Banner and Self-Service.

Unneeded files may be deleted using the new Statement Purge Process.

The Student Billing Statement Process (TSRCBIL) can also now be run in statement mode for schedule bills.

## Prerequisites

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Before you can use this enhancement at your institution, you must first install the following:

- General Release 7.3
- Accounts Receivable Release 7.3
- Student Self-Service Release 7.3

For additional information, refer to the *General 7.3 Release Guide* and the *Student Self-Service 7.3 Release Guide*.

## Tasks

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This section includes information about tasks you will need to perform to use the e-bill functionality delivered with this release.

**Note:** For additional information about implementing the e-Bill functionality to store and view statement files, refer to Appendix A, “Frequently Asked Questions (FAQ)” on page 87.

## Determine How Statement Files will be Stored

In order to be able to display statements to students and staff, the output from the Student Billing Process (TSRCBIL) must first be parsed and stored. It is recommended that the files be stored in the database as Binary Large Object files (BLOBs), but it is also an option to keep the statement files in the file system and store only a Binary File Locator (BFILE) in the database. Please refer to the *General Release Guide* and the technical documentation for the Large Object API (`gb_large_object`) for additional information.

Parsing of the TSRCBIL output into multiple files (one per statement) may be accomplished with a local script or a third-party tool. Please see Appendix A for a sample Perl script for this task.

The institution may decide to use third-party software to convert the output from TSRCBIL into another format, such as the Adobe Portable Document Format (PDF). While not a requirement to use this enhancement, the conversion to PDF allows for a much better presentation of the statement through the addition of graphical elements including column separators, and the branding of this important communication with your logo.

The individual statement files may then be stored in the Banner database and displayed via Banner or Self-Service. See Appendix A for a sample script to store the files from the file system.

## Determine Student Access to Statements

Access to statements may be restricted for Students. Access to statements is not restricted for office staff, who can view all statements that exist in the database.

To set student access to statements, perform the following steps.

1. In Banner, access the Accounts Receivable Billing Control Form (TGACTRL)
2. In the **Statement History Months** field, enter the number of months that a student can view as history. The default value for this field is 3.

Banner calculates a cut-off date based on the number of months entered in this field. Students have access to all statements with a bill date greater than or equal to the calculated cut-off date. For additional information, please refer to “Accounts Receivable Billing Control Form (TGACTRL)” on page 24.

3. Save.

## Determine Student Access to Payment History

Payment history is based upon the value entered on TGACTRL to allow office staff to view exactly what the student sees in Self Service. For detailed information, refer to “Accounts Receivable Billing Control Form (TGACTRL)” on page 24.

To set student and office staff access to payment history since a specified date, perform the following steps.

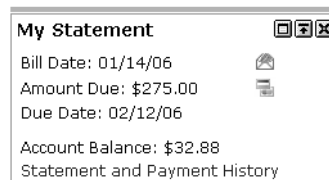
1. In Banner, access the Accounts Receivable Billing Control Form (TGACTRL)
2. In the **Payment History Months** field, enter the number of months that office staff and students can view as history. The default value for this field is 3.

Banner calculates a cut off date based on the number of months entered in this field. Eligible payments with an entry date greater than or equal to the calculated cutoff date are displayed.

## New Channel

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With this enhancement, a new channel is available labelled My Statement, that will be accessible to students who use the Luminis portal. This informational channel provides summary information for the current statement, including Bill Date, Amount Due, Due Date, and Term (if the statement is a schedule/bill format). Current account balance also displays.



This channel includes the following navigational links.

- The envelope icon beside the **Bill Date** opens the current statement. For an example of a statement in PDF format, refer to Appendix B, “Sample PDF” on page 93.
- The credit card icon beside the **Amount Due** accesses the Credit Card Payment page in Student Self-Service. The credit card icon displays if either the **Amount Due** or **Account Balance** is a positive amount.
- The Statement and Payment History link accesses the Statement and Payment History page in Student Self-Service. This page enables students to view payment history and unbilled activity for an account. For detailed information about this web page, refer to “Statement and Payment History (bwsksphs.P\_ViewStatement)” on page 13.

## New Web Menu

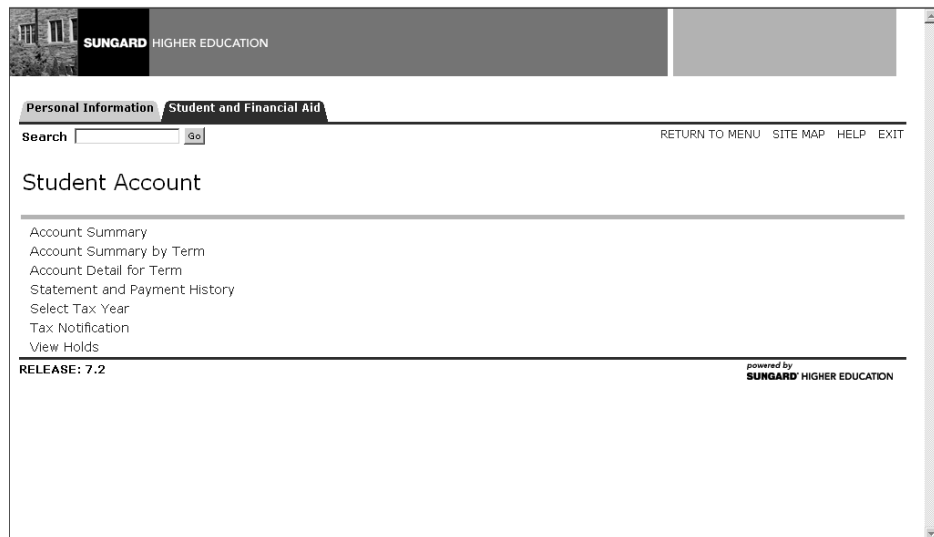
---

### Student Account

A new Student Account menu has been added to the Student and Financial Aid Page to streamline access to account information.

### Links

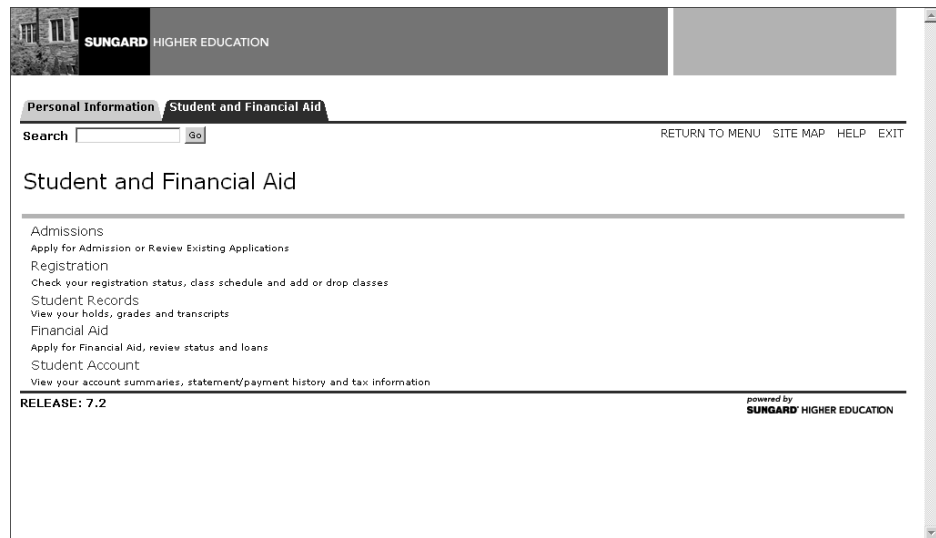
- Links to account information were removed from the Student Records menu and moved to the new Student Account menu.
- This page includes a link to student holds. This same link still appears on the Student Records menu.



## Changed Menus

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A new link, Student Account, has been added to the Student and Financial Aid Page.



## New Web Page

### Statement and Payment History (bwsksphs.P\_ViewStatement)

The Statement and Payment History page (bwsksphs.P\_ViewStatement) enables students to view and print their current and stored statements, payment history, and unbilled activity for an account.

**Note:** For an example of a statement in PDF format, please refer to “Sample PDF” on page 93.

Students will be able to view previous statements and payment history as defined by the institution on the Accounts Receivable Billing Control Form (TGACTRL).

### Accessing the Statement and Payment History Page

When you choose the Statement and Payment History link from the Student Account menu, the system displays a page with four different tabs at the top. Select the appropriate tab to display the information you want to review.

<i>Tab Label</i>	<i>Type of Information</i>
Statement	Current statement.

Tab Label	Type of Information
Payment History	Recorded payments for the account.
Unbilled	Account activity that has not been billed yet.
All	Cumulative display of all the information on the other tabs.

### Web Page Fields - Statement Tab

This section includes information about the most recent statement.

The screenshot displays the SUNGARD HIGHER EDUCATION interface. At the top, there is a navigation bar with 'Personal Information' and 'Student and Financial Aid' tabs. Below this is a search bar with a 'Go' button and links for 'RETURN TO MENU', 'SITE MAP', 'HELP', and 'EXIT'. The main heading is 'Statement and Payment History', with a timestamp 'EBILL ShowMe MyBill 04/12/06 03:43 pm'. A secondary navigation bar includes 'Statement', 'Payment History', 'Unbilled', and 'All' tabs. The content area shows 'Statements available for review since 12/01/05' and 'Account Balance: \$12.88'. There is a 'Select Statement Bill Date:' dropdown menu set to '01/14/06' and a 'View Statement' link. A 'Statement Summary' box lists 'Amount Due: \$275.00' and 'Due Date: 02/12/06'. At the bottom, there are links for '[ Account Summary | Account Summary by Term | Account Detail for Term | Credit Card Payment ]' and a 'RELEASE: 7.3' notice. The SUNGARD HIGHER EDUCATION logo is visible in the bottom right corner.

Fields	Descriptions
Statements available for review since	Indicates the availability date for statements.  The dates available for students to review are determined by the number of months entered in the <b>Statement History</b> field on the Accounts Receivable Billing Control Form (TGACTRL).
Account Balance	Current Account Balance as of today.

<b>Fields</b>	<b>Descriptions</b>
Select Statement Bill Date	<p>Pull-down list that enables the user to choose the date for the statement they would like to review.</p> <p>The dates available in this pull-down list for students to review are determined by the number of months entered in the <b>Statement History</b> field on the Accounts Receivable Billing Control Form (TGACTRL).</p>
View Statement	<p>Hypertext link to the statement for the selected date. For an example of a statement in PDF format, please refer to Appendix B, "Sample PDF" on page 93.</p>
Amount Due	<p>Total amount due at the time of billing.</p>
Due Date	<p>Date payment is due.</p>

### Web Page Fields - Payment History Tab

This tab enables you to review payment history for an account. Transactions that display in payment history are detail codes marked as Payment History on the Detail Code Control forms (TSADETC or TFADETC). For more detailed information on marking a detail code as Payment History, refer to "Detail Code Control Form - Student (TSADETC) and Detail Code Control Form - Finance (TFADETC)" on page 25.

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Personal Information / Student and Financial Aid

Search  Go RETURN TO MENU SITE MAP HELP EXIT

Statement and Payment History EBILL ShowMe MyBill  
04/12/06 03:51 pm

Statement / **Payment History** / Unbilled / All

Payments since 12/01/05  
Account Balance: \$12.88

Post Date	Term	Description	Amount	Bill Date
02/05/06	Spring 2005-2006	Refund to Student	-\$125.00	
02/03/06	Spring 2005-2006	Lock Box Payment	\$400.00	
01/08/06	Spring 2005-2006	Check	\$9,075.00	01/14/06

[ Account Summary | Account Summary by Term | Account Detail for Term | Credit Card Payment ]

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Fields	Descriptions
Payments since	Identifies beginning date for which payments are listed.  The availability date specified here is determined by the payment history cut-off date. This date is calculated using the number of months entered in the <b>Payment History</b> field on the Accounts Receivable Billing Control Form (TGACTRL).
Account Balance	Current Account Balance as of today.
Post Date	Date the payment was posted to the account (shown in Banner as <b>Entry Date</b> ).
Term	Term associated with the payment.
Description	Description of the transaction.
Amount	Amount of the transaction.
Bill Date	Date transaction was billed on a statement. A blank in this field indicates that the transaction has not yet appeared on a statement.



## Web Page Fields - Unbilled Tab

This section contains information about activity posted to the account since the last statement was generated, as well as transactions that had a future effective date at the time of billing.

The screenshot shows the SUNGARD Higher Education web portal. The main navigation bar includes 'Personal Information' and 'Student and Financial Aid'. Below this is a search bar and utility links like 'RETURN TO MENU', 'SITE MAP', 'HELP', and 'EXIT'. The current page is titled 'Statement and Payment History' and includes a timestamp 'EBILL ShowMe MyBill 04/12/06 03:52 pm'. The 'Unbilled' tab is selected, showing 'Unbilled Account Activity' with an 'Account Balance: \$12.88'. A table lists transactions with columns: Effective Date, Term, Description, Charge, Payment, and Post Date. The table contains three rows of data. At the bottom, there are links for '[ Account Summary | Account Summary by Term | Account Detail for Term | Credit Card Payment ]', the version 'RELEASE: 7.3', and a 'powered by SUNGARD HIGHER EDUCATION' logo.

Effective Date	Term	Description	Charge	Payment	Post Date
02/10/06	Spring 2005-2006	Library Fine	\$12.88		02/10/06
02/05/06	Spring 2005-2006	Refund to Student	\$125.00		02/05/06
02/03/06	Spring 2005-2006	Lock Box Payment		\$400.00	02/03/06

Fields	Descriptions
Account Balance	Current Account Balance as of today.
Effective Date	Effective date of the transaction.
Term	Term associated with the transaction.
Description	Description of the transaction.
Charge	Charge amount of the transaction.
Payment	Payment amount of the transaction.
Post Date	Date the charge or payment was posted to the account (shown in Banner as <b>Entry Date</b> ).

## Web Page Fields - All Tab

This tab enables you to access a cumulative display of all the information displayed on the other tabs. For descriptions of each field, refer to the following:

- “Web Page Fields - Statement Tab” on page 14,
- “Web Page Fields - Payment History Tab” on page 15, and
- “Web Page Fields - Unbilled Tab” on page 17

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Personal Information Student and Financial Aid

Search  Go RETURN TO MENU SITE MAP HELP EXIT

Statement and Payment History EBILL ShowMe MyBill  
04/12/06 03:53 pm

Statement Payment History Unbilled **All**

Statements available for review since 12/01/05

Account Balance: \$12.88

Select Statement Bill Date: 01/14/06 View Statement

**Statement Summary**

Amount Due: \$275.00  
 Due Date: 02/12/06

**Payments since 12/01/05**

Post Date	Term	Description	Amount	Bill Date
02/05/06	Spring 2005-2006	Refund to Student	-\$125.00	
02/03/06	Spring 2005-2006	Lock Box Payment	\$400.00	
01/08/06	Spring 2005-2006	Check	\$9,075.00	01/14/06

**Unbilled Account Activity**

Effective Date	Term	Description	Charge	Payment	Post Date
02/10/06	Spring 2005-2006	Library Fine	\$12.88		02/10/06
02/05/06	Spring 2005-2006	Refund to Student	\$125.00		02/05/06
02/03/06	Spring 2005-2006	Lock Box Payment	\$400.00		02/03/06

RELEASE: 7.3 [ Account Summary | Account Summary by Term | Account Detail for Term | Credit Card Payment ] powered by  
**SUNGARD HIGHER EDUCATION**

## New Web Page Links

Links are enabled at the bottom of several Web pages by the seed data included in this release. Bottom links may be customized via WebTailor Administration, Web Menus and Procedures.

### Statement and Payment History Page (bwsksphs.P\_ViewStatement)

Links on the Statement and Payment History page enable users to access different pages, as summarized in the following chart.

<i>Link</i>	<i>Action</i>
Account Summary	Links to the Account Summary page (bwskoacc.P_ViewAcctTotal).
Account Summary by Term	Links to the Account Summary by Term page (bwskoacc.P_ViewAcct).
Account Detail for Term	Links to the Account Detail for Term page (bwskoacc.P_ViewAcctTerm).
Credit Card Payment	Links to the Credit Card Payment page (bwckcpmt.P_CreditCardPayment).

### **Account Summary (bwskoacc.P\_ViewAcctTotal)**

A link to the Statement and Payment History page has been added to the Account Summary page.

### **Account Summary by Term (bwskoacc.P\_ViewAcct)**

A link to the Statement and Payment History page has been added to the Account Summary by Term page.

### **Account Detail for Term (bwskoacc.P\_ViewAcctTerm)**

A link to the Statement and Payment History page has been added to the Account Detail for Term page.

## **New Form**

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### **Statement and Payment History Inquiry Form (TGISTMT)**

This new Banner inquiry form enables office staff to review available statements, payment history, and any unbilled activity for an account.

The View Statement button enables users to open the billing statement for the highlighted record.

The TGISTMT form will help office staff to assist students, since they can now see exactly the same information that the student sees. They will also be able to tell, which statements the student has access to by the value displayed in the **View Indicator** field on the Statements tab. This field is the one-character field to the left of the **Bill Date** field.

### Statement and Payment History Inquiry Form (TGISTMT) - Statements tab

Select this tab to review all available statements for a student.

Fields	Descriptions
(View Indicator)	Identifies who can view the statement: Y- both office staff and student can view the statement * - only office staff can view the statement blank - no statement available
Bill Date	Date the bill is generated for the account.
Amount Due	Total amount due on, or in response to, this billing statement.

<b>Fields</b>	<b>Descriptions</b>
Due Date	Date that payment is due on account.
Balance when Billed	Account balance at the time of billing.
Term	Term for which statement is produced in Schedule Bill mode.
Email Address	Email address for the recipient of the bill if determined, used, and saved when processing the statement output.
View Statement	Button that enables the user to view the statement directly for the highlighted record.





## Changed Forms

### Accounts Receivable Billing Control Form (TGACTRL)

Two new fields have been added to this form to determine the number of months back that statements and payment history can be viewed. The default value for each field is 3.

The screenshot shows a window titled "Accounts Receivable Billing Control TGACTRL 7.3 (s4b70)". The form contains the following fields and options:

- Default Rule Class:
- Statement History Months:
- Payment History Months:
- Automatic Receipt Print
- Enforce Restrictions on User Profile Form
- Assign Cashiers to Supervisor
- Address Required for Miscellaneous Transactions
- Feed Priors Using:  Transaction Date,  System Date
- Feed Future Effective Transactions
- Feed Futures Using:  Transaction Date,  System Date
- Holds Password:
- Invoice Prefix:
- Activity Date:



<b>Fields</b>	<b>Descriptions</b>
Statement History Months	<p>Number of months back that payment history can be viewed in Banner and Self-Service. Valid values are 0 - 99 months; the default value is 3.</p> <p>Students can always view the most recent statement stored; a value of 0 will display only the most recent statement stored without regard to cut-off date. Banner calculates the cut-off date by comparing the system date to the number of months of history, then uses the first day of that month as the cut-off date.</p> <p>Example: Assume the number entered in this field is 5 and the system date is 6/21/06. The current month is June, so five months back is 1/21/06. Since the first day of the month is used as the cut-off date, the history cutoff date is 1/01/06. This means that statements with a bill date equal to or greater than 1/01/06 may be displayed.</p> <p><b>Note:</b> Staff access to statements is not limited. Office staff can view all statements that have been stored.</p>
Payment History Months	<p>Number of months back that payment history can be viewed in Self Service. Valid values are 0 - 99 months; the default value is 3. A value of 0 shows payments made in the current month only.</p> <p>Payments will display that have an entry date that is greater than, or equal to, the cut-off date.</p> <p><b>Note:</b> Students and office staff will see the same payment history.</p>

### **Detail Code Control Form - Student (TSADETC) and Detail Code Control Form - Finance (TFADETC)**

A new check box has been added to these forms that lets you decide whether to include detail codes as payment history.

**Note:** If no detail codes are marked, no payment history will display for a student.

The screenshot shows a window titled "Detail Code Control Form - Student: TSADETC 7.3 (s4b70)". It contains three rows of detail code entries, each with a set of fields and checkboxes. The third row is highlighted.

Detail Code	Type	Category	Grant Type	Priority	Refund Code	Direct Deposit	Refundable	Receipt	Term Based	Like Term	Like Aid Year	GL Enterable	Active	Pay Type	Title IV	Institutional Charges	Exclude Invoice Print	Payment History
SLMP	P	CSH		000		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6LMC	C	FEE		999		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SLMP	P	CSH		000		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Fields**

**Descriptions**

Payment History If selected, flags this detail code to be included in the payment history.

## New Process

---

### Statement Purge Process (TGPSTMT)

#### Description

This new process can be used by institutions to purge statements from the Large Object Storage Table (GORBLOB) that are no longer needed or that were simply created in error. Please refer to the Technical Documentation of the Large Object API (`gb_large_object`) for details regarding the file purge. This process deletes the header row from the Statement Header Table (TBBSTMT), but does not affect any of the individual transactions that were displayed on the statement. Statements with a bill date that precedes or is equal to the Bill Date are purged; optional population selection parameters may also be used when specifying which student's statements to purge.

This process produces report output for your review. Purges by Bill Date Cutoff display the ID and Name of the student and a count of the number of statements being purged. A control report shows the total number of students for whom statements are purged and total count of statements removed. Purges by Bill Run display the Run Number, Bill Date, and Count of Statements being purged.

#### Parameters

<i>Name</i>	<i>Required?</i>	<i>Description</i>	<i>Values</i>
Bill Date Cutoff	Y	Records with a bill date less than or equal to the parameter date will be removed.	
Bill Run	N	Enter a value for this parameter to purge records for reset following a billing error.	The job submission run number for the billing. If populated, the Bill Date Cutoff must match the Bill Date used when creating the statements.

<b>Parameters</b> (cont.)	<i>Name</i>	<i>Required?</i>	<i>Description</i>	<i>Values</i>
	Run Mode	Y	The process can be run in audit or update mode. Audit mode will display records pending delete. Update mode will perform actual delete of records.	A - Audit U - Update
	Application Code	N	General area for which each selection ID is defined.	Application Inquiry Form (GLIAPPL)
	Selection Identifier	N	Sub-population.	
	Creator ID	N	User ID of the person who created rules for the sub-population.	
	User	N	User ID of the person who ran the population selection.	

## Changed Process

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### Student Billing Statement (TSRCBIL)

The TSRCBIL process generates a .lis file of statements for students who owe a balance to the school. Each statement is mailed to the student at a designated address. Before this release, after statements were generated and sent, there was no way to access or view previous statements unless the institution saved a copy.

With this enhancement, after generating the TSRCBIL.lis file, clients may parse the output and store the individual statements. Clients may opt to use third-party software to perform the parse, enhance and brand the statement, convert each file into PDF format, and store the PDF file. These files can then be displayed in Banner or Self-Service. For additional information, refer to Appendix A, “Frequently Asked Questions (FAQ)” on page 87. For an example of a statement in PDF format, refer to Appendix B, “Sample PDF” on page 93.

**Note:** This enhancement addresses #CMS-RPE26121.

### New Parameters

- User (Parameter 09)  
This new parameter identifies the ID of the person who ran the population selection.
- Update Accept Charges (Y/N) (Parameter 14)  
This parameter gives your institution the option to update or not update the accept charges flags in registration and location management when credits (contracts, exemptions and deposits) are posted to a student's account. A value of *Y* in this parameter accepts the charges by updating the Accept Charges indicator on SFBETRM, SLRRASG, SLRMASG, and SLRPASG. *Y* is the default value.

**Note:** This new parameter addresses #CMS-RPE2840.

## Changed Parameters

Parameters changed with this release are summarized in the following chart:

<i>Parameter Name</i>	<i>Current Parameter Number (Previous Parameter Number, if applicable)</i>	<i>Change</i>	<i>Associated Defect/RPE</i>
ID Number or "COLLECTOR"	Parameter 04	When a specific ID is entered in this parameter, the Control Report now prints, if requested.	#CMS-DFCT98561
Due Date	Parameter 18 (formerly Parameter 14)	Parameter name changed from Schedule/Bill Due Date to Due Date. Applies to schedule bills and statements. Parameter number changed.	

Section 1 e-Bill enhancement - Functional  
 Changed Process

<i>Parameter Name</i>	<i>Current Parameter Number (Previous Parameter Number, if applicable)</i>	<i>Change</i>	<i>Associated Defect/RPE</i>
Run Mode	Parameter 15	Includes two new options for Schedule Bill Invoice and Schedule Bill Statement mode. The Financial mode option was removed.  Schedule Bill Invoice mode (SCHEDINV) is the current schedule bill functionality which does not update bill and due dates.  Schedule Bill Statement mode (SCHEDSTMT) is a new run mode that updates bill and due dates for transactions that are included in the Amount Due, without regard to the term of the transaction.	#CMS-RPE28101
Create Cont, Deposits, Expt Credits	Parameter 22 (formerly Parameter 17)	Cont, Deposits, Expt Indicator has been renamed Create Cont, Deposits, Expt Credits. Applies to Applycred, Statement, and Schedule Bill Statement modes. Parameter number changed.	
Billing Date	Parameter 17 (formerly Parameter 22)	Parameter number changed.	

<i>Parameter Name</i>	<i>Current Parameter Number (Previous Parameter Number, if applicable)</i>	<i>Change</i>	<i>Associated Defect/RPE</i>
Include Zero Balances	Parameter 23 (formerly Parameter 30)	With this release, the Include Zero Balances parameter distinguishes between an account with no activity since the last statement and an account that had activity but ended up with a zero balance. This enables institutions to bill zero balance accounts with current activity, and to avoid billing accounts with no activity. Parameter number changed. Refer to Miscellaneous Enhancements below for more information.	#CMS-RPE24610
Do Dynamic Calculation	Parameter 30 (formerly Parameter 32)	Parameter number changed.	

## Parameters Removed

- Produce Schedule/Bill (Y/N) (formerly Parameter 11). Run mode, SCHEDINV and SCHEDSTMT (parameter 15) now determines if schedule bill is produced.
- Financial Aid Indicator (formerly Parameter 18). Removed since this parameter was specifically used for an interface which is no longer applicable.
- Days in Billing Cycle (formerly Parameter 23). Replaced by the Due Date parameter (parameter 18).



## Miscellaneous Enhancements to TSRCBIL

### *Statement Number*

TSRCBIL generates a unique statement number for each bill that it creates.

In STATEMENT and SCHEDSTMT modes, this number is kept in the new statement header table as `tbbstmt_stmt_number` and printed in the statement output. It will be used to store a link to the statement for subsequent display.

- In STATEMENT mode this link will be on the 3rd line, beginning in the first position.
- In SCHEDSTMT, this link appears on line 58 (unless the value of the `BLANK_PAPER_BOTTOM_TOTALS_START_LINE` has been modified in the TSRCBIL source code). The column in which it begins is dependant on the width of the schedule bill which varies with the choices made for columns to display on TSASBRL, but will be aligned to the beginning of the "Student Id" literal in the next line of the payment stub.

**Note:** INVOICING and SCHEDINV mode of TSRCBIL will also use values from the statement number sequence during processing, but these values will be deleted from the TBBSTMT table. Therefore, it is expected that there will be gaps in the values that are in the `tbbstmt_stmt_number` column.

### *Modifications to the Include Zero Balances Parameter*

Previously, the Include Zero Balances parameter did not distinguish between an account with no activity since the last statement and an account that had activity but ended up with a zero balance. With this release, there are now 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 the institution chooses for this parameter determines the accounts for which bills will be generated, as summarized in the following charts.

**Chart 1 - Sample Accounts**

	<i>Account 1</i>	<i>Account 2</i>	<i>Account 3</i>	<i>Account 4</i>
Previous Balance	N/A	0	0	200
Current Activity*	none	none	100 -100	-200
Account Balance	0	0	0	0

\* Because TSRCBIL has not previously updated the Bill Date for zero balance accounts, 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 use of the new (C)urrent activity parameter option for zero balances.

**Chart 2 - Impact of Include Zero Balance Parameter on Output**

<i>Parameter Options</i>	<i>Account 1</i>	<i>Account 2</i>	<i>Account 3</i>	<i>Account 4</i>
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) - Statement/ Invoice modes	Not Printed	Not Printed, Mass mode Printed, if included in Population Selection	Printed	Printed
Y (include all zero balances) - Schedule bill mode	Printed	Printed	Printed	Printed

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

*Parameters Submitted via Process Submission Control Form (GJAPCTL)*

When TSRCBIL is submitted from the Process Submission Controls form (GJAPCTL), the system performs the following additional edits.

- All four or none of the Population Selection parameters are given.
- The Due Date must be greater than the Bill Date.
- If the Run Mode is SCHEDSTMT or SCHEDINV, then the Schedule/Bill Rules Code and Campus Code(s) parameters are required.
- If the Run Mode is STATEMENT or SCHEDSTMT, then the ID Number (or “COLLECTOR”) parameter may not be populated.
- If the Run Mode is APPLYCRED, then the Create Contract, Deposit, and Exemption Credits parameter must be set to Y.

*PIDM from Account Charge/Payment Detail Table (TBRACCD) is not in SPRIDEN*

Previously, if a PIDM in the TBRACCD table no longer existed in the SPRIDEN table, there was no easy way for the user to learn this. With the implementation of the `tb_statement` API, a message is now included in the `.log` file.

*Blank Page between Schedule/Bills*

The extra blank page that printed between each Schedule/Bill when TSRCBIL was run in sleep/wake mode has been eliminated.

**Note:** This change addresses #CMS-RPE25737.

*Section 1 e-Bill enhancement - Functional  
Changed Process*

*TSRCBIL "FINANCIAL" mode*

The description of TSRCBIL on the Process Maintenance Form (GJAJOB) has been updated to exclude references to MICRO FAIDS, since there is no longer an interface between AR and MICRO FAIDS. Within the TSRCBIL process, cursors and variables previously used to read from TBTFADB in FINANCIAL mode or to calculate committed aid from AWD have been removed.

**Note:** This change addresses #CMS-RPE28101.

*Sleep/Wake Printer Label*

When a printer parameter was selected on TSRCBIL, it displayed on the Control Report with the label, "Collector File Selection Criteria". The label has been changed to be more clear. It now reads, "Printer Destination."

**Note:** This change addresses #CMS-RPE47180.

*TSRCBIL Process without a Population Selection*

Performance problems that existed when TSRCBIL was run in ZIP code order without a population selection have been addressed by restructuring the selection of accounts to bill, their addresses and sort/print steps.

**Note:** This change addresses #CMS-DFCT54060.

*No Student Address on SPAIDEN*

Previously, TSRCBIL would not print a schedule/bill if the student did not have an address on SPAIDEN with the requested address type, and the schedule/bill was to print in ZIP/Postal Code, Name order.

Now, TSRCBIL will print the schedule/bill with a warning message: *No Address*.

**Note:** This modification addresses #CMS-DFCT89417.

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*Name Prefix and Suffix Print*

The name prefix and suffix now print when you run TSRCBIL in schedule/bill mode. When there is not enough space to print the full name prefix and suffix, the last name is truncated to enable the first three characters of the suffix to print.

**Note:** This change addresses #CMS-DFCT90475.

*Instructor Name Prints on Schedule/Bills*

The student schedule/bill now prints the name of the instructor, even if the primary instructor was not associated with the first meeting session.

**Note:** This modification addresses #CMS-DFCT96035.

*Accounts with No Addresses Print First*

With the 7.3 release, the output will display the accounts with no addresses first, followed by those with an address.

## Parameter Chart

For this release, parameters have been added to the TSRCBIL process, the order of parameters has been rearranged, and some parameters have been removed. The following comprehensive chart is provided as a reference. This chart identifies all parameters now available for this process.

<b>Parameters</b>	<i>Name</i>	<i>Required?</i>	<i>Description</i>	<i>Values</i>
01	Term	Y	The term code you enter. This prints on the upper left-hand corner of bill, and will be used by the system to identify contract, exemption rules and deposits to be included in processing if the parameter Create Cont, Dep, Expt Credits is set to <i>Y</i> . It will also be used to look at the financial aid and memos to be selected for the term entered.	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)

<b>Parameters</b> (cont.)	<i>Name</i>	<i>Required?</i>	<i>Description</i>	<i>Values</i>
04	ID Number (or "COLLECTOR")	N	Enter the ID number for which the invoice or schedule/bill invoice is to be produced. Enter COLLECTOR to process all requests in collector file (must have requested the invoice online); leave blank to process all accounts or to process a specified population. If an ID number or COLLECTOR is entered, TSRCBIL will only produce invoices. This parameter should be left blank when running in STATEMENT mode.	
05	Printer	N	Indicate the printer destination for this process when running in COLLECTOR mode. If you requested a printer through the Account Printer Selection Form (TOADEST) and want to retrieve these requests, you must use the same printer.	
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.	



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Parameters (cont.)	Name	Required?	Description	Values
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.	
10	Run in Sleep/Wake mode (Y/N)	N	Enter Y to begin sleep/wake cycling of this process and printer.	Y Use sleep/wake N Do not use sleep/wake (default)
11	Sleep interval	N	Enter the time in seconds for the process to pause before resuming execution. The lowest enterable value is 1. The highest enterable value is 999999. The default value is 60.	
12	Schedule/Bill Rules Code	N	Enter the rules code to be used to access the rules on the Schedule/Bill Rules Form (TSASBRL).	Schedule/Bill Rules Code Validation Form (TTVSBRC)

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Changed Process

Parameters (cont.)	Name	Required?	Description	Values
13	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)
14	Update Accept Charges (Y/N)		This parameter allows clients to choose whether or not to update accept charges flag when credits are posted to the student's account. Applies to STATEMENT mode, SCHEDSTMT mode, and APPLYCRED mode.	Y Update accept charges flag in registration (SFBETRM) and location management (SLRRASG, SLRMASG, SLRPASG) N Do not update accept charges flag
15	Run Mode	Y	Choose one of five run modes:  INVOICING - prints invoice of charges/payments STATEMENT - prints statement of charges/payments, updates bill date and due date, begins aging APPLYCRED - calculates and applies credits for contracts, exemptions, and deposits, but will not produce a billing statement or invoice SCHEDINV - prints a student schedule and invoice SCHEDSTMT - prints a student schedule and statement of term charges and payments, and updates bill/due dates in the Account/Charge Payment Detail Table (TBRACCD) for unbilled transactions, without regard to term, that are included in Amount Due.	INVOICING (default) STATEMENT APPLYCRED SCHEDINV SCHEDSTMT

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Changed Process

Parameters (cont.)	Name	Required?	Description	Values
16	Currency Code	N	The user can specify foreign currency in which invoices and statements will be produced.	Currency Code List (GTVCURR)
17	Billing Date	Y	Enter the billing date for accounts being billed. 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. Enter the date in DD-MON-YYYY format. The default is sysdate  <b>Note:</b> Schedule Bill Statement Mode also uses this date, if Current Due Cutoff Date is not populated on TSASBRL.	
18	Due Date	N	Due date used for schedule/bills and statements, and to update the Due Date of the transaction.	
19	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 running in STATEMENT mode.	Y Print future detail (default) N Do not print future detail
20	Futures Print Date	N	Specify a date to display when future items are printed.	

Parameters (cont.)	Name	Required?	Description	Values
21	Print Order	Y	I prints in ID number order; N prints in alpha/last name order; ZI prints in Zip code and ID number order; ZN prints in Zip Code and alpha/last name order.	<p>I ID number order</p> <p>N Alpha/last name order</p> <p>ZI Zip code and ID number order</p> <p>ZN ZN prints in Zip Code and alpha/last name order (default)</p>
22	Create Cont, Dep, Expts Credits	Y	<p>Y (Yes) When run in INVOICING or SCHEDINV mode, estimates contracts, exemptions, and deposits.</p> <p>Y (Yes) When run in STATEMENT, SCHEDSTMT, or APPLYCRED mode, calculates and applies contracts, exemptions, and deposits.</p> <p>N (No) does not reflect or calculate contracts, exemptions, or deposits.</p>	<p>Y Mode dependent, see description (default)</p> <p>N No estimates or calculations</p>
23	Include Zero Balances	N	<p>The Include Zero Balances 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. For additional information, refer to “Modifications to the Include Zero Balances Parameter” on page 33.</p> <p><b>Note:</b> Zero Account Balance refers to overall account balance.</p>	<p>N Exclude all zero balances</p> <p>C Include zero balances only if there was activity on the account.</p> <p>Y Include all zero balances (for schedule bill only)</p>

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Parameters (cont.)	Name	Required?	Description	Values
24	Minimum Acct Balance	Y	<p>Enter minimum balance required for account to be billed. Can request invoices/statements for accounts with a minimum balance, can use negative numbers to retrieve accounts with a credit balance.</p> <p><b>Note:</b> Minimum Account Balance refers to current due account balance.</p> <p><b>Note:</b> The value entered here can be overridden by the value entered for the Include Zero Balance parameter.</p>	
25	Detail Codes to Bill (% valid)	Y	<p>Can produce invoices/statements based on detail code. Enter single detail code or percent (%) for all. Valid values should be selected from the Detail Code Control Form (TSADETC). You can also use some characters of the detail code and a % to get groups of details (R%).</p>	<p>Detail Code Control Form (TSADETC)</p> <p>% All (default)</p>
26	Accounts (P)ers (C)omp or %	Y	<p>Can produce invoices/statements for person accounts-P, company accounts-C, or all accounts-%.</p>	<p>P Person accounts</p> <p>C Company accounts</p> <p>% All accounts (default)</p>

Parameters (cont.)	Name	Required?	Description	Values
The following note applies to parameters 27, 28, and 29.				
<b>Note:</b> Use TSASBRL to define credit processing rules for Schedule Bill processing.				
27	Do you want Memos printed	Y	Enter <i>Y</i> to print all memos. Enter <i>N</i> to not print memos.	Y Print all memos (default)
				N Do not print memos
<b>Note:</b> Third party pre-authorized transactions will print, even if this flag is set to <i>N</i> .				
28	Do you want deposits printed	Y	Enter <i>Y</i> to print all deposits. Enter <i>N</i> to not print deposits.	Y Print deposits (default)
				N Do not print deposits
29	Affect Amount Due indicator	Y	If authorization to use a contract is not required, as specified on the Student Billing Control Form (TSACTRL), this parameter is non-functional. If authorization to use a contract is required, enter <i>Y</i> to affect amount due by the total of pre-authorized charges.	Y Affect amount due (default)
				N Do not affect amount due

Section 1 e-Bill enhancement - Functional  
Changed Process

Parameters (cont.)	Name	Required?	Description	Values
30	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.  <b>Note:</b> This parameter can be used in INVOICING or STATEMENT mode, and can be run only once per term.	Y, N, or blank.  <b>Note:</b> A blank in this parameter acts as an N (no).
31	Print a control report	N	Enter <i>Y(es)</i> to print a control report. Enter <i>N(o)</i> to omit the control report.	Y Print control report (default) N Do not print control report

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## **Section 2 Reconciliation Enhancement**

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This section includes information about the reconciliation enhancement delivered with this release. Changes to the Reconciliation Report (TGRRCN) will display the current General Ledger balances to help users identify out of balance conditions, reflecting any amounts that have not yet been posted to the General Ledger. New views make data from multiple tables more accessible for reporting purposes.

## A/R Reconciliation Report (TGRRCN)

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**Description** The TGRRCN report now provides consolidated information of totals fed, pending transactions, and ledger balances in a summary section to address RPE #CMS-RPE38777. This new summary section includes the following information:

<b>Fields</b>	<b>Descriptions</b>
COAS	Chart of Accounts code
Fund	Fund code
Acct	Account code
A/R Adj Fed Total (receivables)	The total of receivable transactions which have been fed to the general ledger, adjusted for any application of payment amounts which have not yet been fed.
or	
Total Fed (deposits)	The total of deposit balances which have been fed to the general ledger.
Pending GURFEED	Amount waiting to be fed in the Finance Transaction Input Table (GURFEED).

*Section 2 Reconciliation Enhancement  
A/R Reconciliation Report (TGRRCON)*

<b>Fields</b>	<b>Descriptions</b>
In Transit	Amount waiting to be fed in the Transaction Input Table (FGBTRNI) and the Journal Voucher Detail Table (FGBJVCD).
Adjusted Net Fed	Total fed, adjusted for transactions that are still in process.
G/L Balance	G/L Balance for the Chart, Fund, and Account (including ending balance from the prior fiscal year if the G/L roll has not yet occurred)
Difference	Any difference between the calculated amount fed and the G/L balance.

*Report Samples*

The following are report samples that include the new summary sections in this report. The first sample is for a client with Banner Finance installed; the second sample report is for a client who has not installed Banner Finance.

Section 2 Reconciliation Enhancement  
A/R Reconciliation Report (TGRRCON)

Sample Banner Report #1 - Banner Finance installed.

**Report Sample (Page 1 of 7)**

03-23-2006 13:34:56	BANNER University A/R Reconciliation Report	PAGE 1 TGRRCON 7.3
THE FOLLOWING DETAIL CODES DO NOT TOTAL 100 PERCENT		
DETAIL CODE	DESCRIPTION	PERCENTAGE
ZT02	Percent < 100	95.00000
ZT03	Percent > 100	105.00000

**Report Sample (Page 2 of 7)**

03-23-2006 13:34:56	BANNER University A/R Reconciliation Report	PAGE 2 TGRRCON 7.3
THE FOLLOWING DETAIL CODES HAVE NO CHART OF ACCOUNTS		
DETAIL CODE	DESCRIPTION	
CMP1	Campus Tuition 1	
CMP2	Campus Tuition 2	
IFEE	G/L Enterable, no default	
IPAY	G/L Enterable pmt, no default	

Report Sample (Page 3 of 7)

03-23-2006 13:34:56		BANNER University A/R Reconciliation Report						PAGE 3 TGRRCON 7.3	
RECONCILIATION STATISTICS - ACCOUNT DETAIL									
OPEN CHARGES-RECEIVABLES (ACCOUNT A:)									
COAS	FUND	ACCT	DETAIL	PERCENTAGE	TOTAL FED	APPLIED NOT FED	ADJ FED TOTAL	TOTAL NOT FED	A/R BALANCE
B	1110	LMCS01	TBC1	40.00000	2,406.64	.00	2,406.64	.00	2,406.64
					-----				
					2,406.64	.00	2,406.64	.00	2,406.64
B	1110	LMCS03	TBC1	60.00000	3,609.96	.00	3,609.96	.00	3,609.96
					-----				
					3,609.96	.00	3,609.96	.00	3,609.96
FUND TOTAL					6,016.60	.00	6,016.60	.00	6,016.60
B	LMFUND	1119	LMRF	100.00000	.00	200.25	200.25	.00	.00
					-----				
					.00	200.25	200.25	.00	.00
B	LMFUND	1310	T1LM	100.00000	.00	.00	.00	50.00	50.00
			T2LM	100.00000	.00	.00	.00	303.00	303.00
			T3LM	100.00000	.00	.00	.00	2,000.00	2,000.00
					-----				
					.00	.00	.00	2,353.00	2,353.00
FUND TOTAL					.00	200.25	200.25	2,353.00	2,353.00
B	LMM001	1310	T01L	100.00000	3,527.22	.00	3,527.22	1.11	3,528.33
					-----				
					3,527.22	.00	3,527.22	1.11	3,528.33
FUND TOTAL					3,527.22	.00	3,527.22	1.11	3,528.33
OPEN CHARGE TOTAL					9,543.82	200.25	9,744.07	2,354.11	11,897.93

Report Sample (Page 4 of 7)

03-23-2006 13:34:56		BANNER University A/R Reconciliation Report				PAGE 4 TGRRCON 7.3			
RECONCILIATION STATISTICS - ACCOUNT DETAIL									
UNAPPLIED PAYMENTS (ACCOUNT B:)									
COAS	FUND	ACCT	DETAIL	PERCENTAGE	TOTAL FED	APPLIED NOT FED	ADJ FED TOTAL	TOTAL NOT FED	A/R BALANCE
B	4111	2305	FFPL	100.00000	.00	.00	.00	-21,364.00	-21,364.00
					-----	-----	-----	-----	-----
					.00	.00	.00	-21,364.00	-21,364.00
FUND TOTAL					.00	.00	.00	-21,364.00	-21,364.00
B	4113	2305	FDSL	100.00000	-1,000.00	1,000.00	.00	-54,945.00	-55,945.00
								-17,418.00	-17,418.00
								-2,448.00	-2,448.00
					-----	-----	-----	-----	-----
					.00	.00	.00	-74,811.00	-75,811.00
FUND TOTAL					.00	.00	.00	-74,811.00	-75,811.00
UNAPPLIED PAYMENT TOTAL					-1,000.00	1,000.00	.00	-96,175.00	-97,175.00

Report Sample (Page 5 of 7)

03-23-2006 13:34:56		BANNER University A/R Reconciliation Report				PAGE 5 TGRRCON 7.3			
RECONCILIATION STATISTICS - ACCOUNT SUMMARY									
COAS	FUND	ACCT	A/R ADJ	FED TOTAL	PENDING GURFEED	IN TRANSIT	ADJUSTED NET FED	G/L BALANCE	DIFFERENCE
B	1110	LMCS01		2,406.64	.00	.00	2,406.64	2,406.64	.00
B	1110	LMCS03		3,609.96	.00	.00	3,609.96	3,609.96	.00
B	LMFUND	1119		200.25	-799.75	.00	1,000.00	1,000.00	.00
B	LMFUND	1310		.00	-101.00	.00	101.00	101.00	.00
B	LMM001	1310		3,527.22	3,527.22	.00	.00	.00	.00
B	4111	2305		.00	17,000.00	.00	-17,000.00	-17,000.00	.00
B	4113	2305		.00	.00	.00	.00	.00	.00

Report Sample (Page 6 of 7)

03-23-2006 13:34:56		BANNER University A/R Reconciliation Report				PAGE 6 TGRRCON 7.3	
RECONCILIATION STATISTICS - DEPOSITS							
ACCOUNTS CREDITED							
COAS	FUND	ACCT	DETAIL	PERCENTAGE	TOTAL FED	TOTAL NOT FED	TOTAL
B	1110	2420	DHKT	100.00000	210.00	.00	210.00
					-----	-----	-----
					210.00	.00	210.00
				FUND TOTAL	210.00	.00	210.00
B	LMM004	2301	CHL1	100.00000	700.00	1,045.00	1,745.00
					-----	-----	-----
					700.00	1,045.00	1,745.00
				FUND TOTAL	700.00	1,045.00	1,745.00
				CREDIT TOTAL	910.00	1,045.00	1,955.00

Report Sample (Page 7 of 7)

03-23-2006 13:34:56			BANNER University A/R Reconciliation Report				PAGE 7 TGRRCON 7.3		
RECONCILIATION STATISTICS - DEPOSIT SUMMARY									
COAS	FUND	ACCT	TOTAL FED	PENDING GURFEED	IN TRANSIT	ADJUSTED NET FED	G/L BALANCE	DIFFERENCE	
B	1110	2420	-210.00	.00	.00	-210.00	-210.00	.00	
B	LMM004	2301	-700.00	.00	-700.00	.00	.00	.00	



Section 2 Reconciliation Enhancement  
A/R Reconciliation Report (TGRRCON)

Sample Report #2—Banner Finance not installed.

**Report Sample (Page 1 of 7)**

03-28-2006 10:20:16	BANNER University A/R Reconciliation Report	PAGE 1 TGRRCON 7.3
THE FOLLOWING DETAIL CODES DO NOT TOTAL 100 PERCENT		
DETAIL CODE	DESCRIPTION	PERCENTAGE
ZT02	Percent < 100	95.00000
ZT03	Percent > 100	105.00000

**Report Sample (Page 2 of 7)**

03-28-2006 10:20:16	BANNER University A/R Reconciliation Report	PAGE 2 TGRRCON 7.3
THE FOLLOWING DETAIL CODES HAVE NO CHART OF ACCOUNTS		
DETAIL CODE	DESCRIPTION	
CMP1	Campus Tuition 1	
CMP2	Campus Tuition 2	
IFEE	G/L Enterable, no default	
IPAY	G/L Enterable pmt, no default	

Report Sample (Page 3 of 7)

03-28-2006 10:20:16		BANNER University A/R Reconciliation Report RECONCILIATION STATISTICS - ACCOUNT DETAIL					PAGE 3 TGRRCON 7.3	
OPEN CHARGES-RECEIVABLES (ACCOUNT A:) FREE FORMAT CHART OF ACCOUNTS								
	DETAIL	PERCENTAGE	TOTAL FED	APPLIED NOT FED	ADJ FED TOTAL	TOTAL NOT FED	A/R BALANCE	
1110LMCS01	TBC1	40.00000	2,406.64	.00	2,406.64	.00	2,406.64	
			-----		-----		-----	
			2,406.64	.00	2,406.64	.00	2,406.64	
		FUND TOTAL	2,406.64	.00	2,406.64	.00	2,406.64	
1110LMCS03	TBC1	60.00000	3,609.96	.00	3,609.96	.00	3,609.96	
			-----		-----		-----	
			3,609.96	.00	3,609.96	.00	3,609.96	
		FUND TOTAL	3,609.96	.00	3,609.96	.00	3,609.96	
LMFUND1119	LMRF	100.00000	.00	200.25	200.25	.00	.00	
			-----		-----		-----	
			.00	200.25	200.25	.00	.00	
		FUND TOTAL	.00	200.25	200.25	.00	.00	
LMFUND1310	T1LM	100.00000	.00	.00	.00	50.00	50.00	
	T2LM	100.00000	.00	.00	.00	303.00	303.00	
	T3LM	100.00000	.00	.00	.00	2,000.00	2,000.00	
			-----		-----		-----	
			.00	.00	.00	2,353.00	2,353.00	
		FUND TOTAL	.00	.00	.00	2,353.00	2,353.00	
		FUND TOTAL	172.00	2,315.00	2,487.00	.00	172.00	
LMM0011310	T01L	100.00000	3,527.22	.00	3,527.22	1.11	3,528.33	
			-----		-----		-----	
			3,527.22	.00	3,527.22	1.11	3,528.33	
		FUND TOTAL	3,527.22	.00	3,527.22	1.11	3,528.33	
		OPEN CHARGE TOTAL	9,543.82	200.25	9,744.07	2,354.11	11,897.93	

Section 2 Reconciliation Enhancement  
A/R Reconciliation Report (TGRRCON)

Report Sample (Page 4 of 7)

03-28-2006 10:20:16		BANNER University A/R Reconciliation Report				PAGE 4 TGRRCON 7.3	
RECONCILIATION STATISTICS - ACCOUNT DETAIL							
UNAPPLIED PAYMENTS (ACCOUNT B:)							
FREE FORMAT CHART OF ACCOUNTS							
DETAIL	PERCENTAGE	TOTAL FED	APPLIED NOT FED	ADJ FED TOTAL	TOTAL NOT FED	A/R BALANCE	
41112305	FFPL	100.00000	.00	.00	.00	-21,364.00	-21,364.00
			.00	.00	.00	-21,364.00	-21,364.00
	FUND TOTAL	.00	.00	.00	-21,364.00	-21,364.00	-21,364.00
41132305	FDSL	100.00000	-1,000.00	1,000.00	.00	-54,945.00	-55,945.00
	FDUS	100.00000	.00	.00	.00	-17,418.00	-17,418.00
	FFSL	100.00000	.00	.00	.00	-2,448.00	-2,448.00
			-1,000.00	1,000.00	.00	-74,811.00	-75,811.00
	FUND TOTAL	-1,000.00	1,000.00	.00	-74,811.00	-75,811.00	-75,811.00
	UNAPPLIED PAYMENT TOTAL	-1,000.00	1,000.00	.00	-96,175.00	-97,175.00	-97,175.00

Report Sample (Page 5 of 7)

03-28-2006 10:20:16		BANNER University A/R Reconciliation Report			PAGE 5 TGRRCON 7.3	
RECONCILIATION STATISTICS - ACCOUNT SUMMARY						
FREE FORMAT CHART OF ACCOUNTS						
	A/R ADJ	FED TOTAL	PENDING GURFEED	ADJUSTED LEDGER		
1110LMCS01		2,406.64	.00	2,406.64		
1110LMCS03		3,609.96	.00	3,609.96		
LMFUND1119		200.25	-799.75	1,000.00		
LMFUND1310		.00	-101.00	101.00		
LMM0011310		3,527.22	3,527.22	.00		
41112305		.00	17,000.00	-17,000.00		
41132305		.00	.00	.00		

Report Sample (Page 6 of 7)

03-28-2006 10:20:16		BANNER University A/R Reconciliation Report			PAGE 6 TGRRCON 7.3	
RECONCILIATION STATISTICS - DEPOSITS						
ACCOUNTS CREDITED						
FREE FORMAT CHART OF ACCOUNTS						
	DETL	PERCENT	TOTAL FED	TOTAL NOT FED	TOTAL	
11102420	DHKT	100.00000	210.00	.00	210.00	
			210.00	.00	210.00	
		FUND TOTAL	210.00	.00	210.00	
LMM0042301	CHL1	100.00000	700.00	1,045.00	1,745.00	
			700.00	1,045.00	1,745.00	
		FUND TOTAL	700.00	1,045.00	1,745.00	
		CREDIT TOTAL	910.00	1,045.00	1,955.00	

Report Sample (Page 7 of 7)

03-28-2006 10:20:16		BANNER University A/R Reconciliation Report			PAGE 7 TGRRCON 7.3	
RECONCILIATION STATISTICS - DEPOSIT SUMMARY						
FREE FORMAT CHART OF ACCOUNTS						
	TOTAL FED	PENDING GURFEED	ADJUSTED LEDGER			
11102420	-210.00	.00	-210.00			
LMM0042301	-700.00	.00	-700.00			

## Changed Table

---

### TGRCOLR Collector Table

A new column has been added to the TGRCOLR collector table, which identifies the source of the data. Values which may be populated in `tgrcolr_source` are

ACCD	Receivable transactions (TBRACCD)
DEPO	Deposits (TBRDEPO)
MISD	Miscellaneous Receipts (TBRMISD)

## Changed Process

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### TGRRCRON Reconciliation Process

Although it is common practice to clear collector tables at the end of a Banner process, when you run TGRRCON, the TGRCOLR collector table is cleared only at the start. The new source column enables the process to retain a snapshot of the summarized receivable data including the accounting information. This information is retained in case your institution chooses to perform additional analysis.

## New Views

---

Previously, query functionality was not readily available to identify all records associated with a given feed document from multiple Accounts Receivable tables.

Two new views (TBVDTAP and TBVDTTR) delivered with this release address #CMS-RPE48829. These views make data more accessible for reporting purposes.

### Detail of Application of Payments View (TBVDTAP)

This view returns information regarding application of payment detail in the Detail Application of Payment Table (TBRAPPL) and the Research Accounting

Application of Payment Table (TRRAPPL), including data from the associated transaction table, the detail code table, and identification tables.

### Detail of Accounts Receivable Transactions View (TBVDTTR)

This view returns information from the four primary transaction tables in Accounts Receivable, together with data from the detail code table and identification tables. Information for Charge/Payment Detail (TBRACCD), Grant Detail (TRRACCD), Deposits (TBRDEPO), and Miscellaneous Transactions (TBRMISD) has been combined into a single view.

You can view this information by feed document or by cashier session.

- (a) The index key used to return detail of AR transactions by feed document is `tbvdttr_feed_doc_code`.
- (b) Index keys used to return detail of AR transactions by cashier session include the following: `tbvdttr_session_number`, `tvdttr_user`, and `tbvdttr_cshr_end_date`.

**Note:** The sign shown for miscellaneous transaction amounts in the new views is determined by using a combination of the Debit/Credit indicator and the Pay Type of the detail code. While amounts are always entered as positive on the TFAMISC and TSAMISC forms, the amount displayed reflects the impact the transaction will have in the ledgers, as shown in the following charts.

#### *Impact of Initial Miscellaneous Transactions*

<i>Transaction Type</i>	<i>Code Type</i>	<i>Sign</i>	<i>Impact</i>
Debit	Payment Code	Positive	Increases A side of accounting. Debit to Asset or Expense.
Credit	Charge Code	Positive	Increases B side of accounting. Credit to Liability or Revenue

#### *Impact of Reversing Miscellaneous Transactions*

<i>Transaction Type</i>	<i>Code Type</i>	<i>Sign</i>	<i>Impact</i>
Debit	Charge Code	Negative	Reduces B side of accounting.
Credit	Payment Code	Negative	Reduces A side of accounting.

## Section 3 e-Bill Enhancement - Technical

This section includes information about the e-bill enhancement delivered with this release. This enhancement will enable both students and office staff to access and view statements, payment history, and unbilled activity.

### New Tables

#### Statement Header Table (TBBSTMT)

This Statement Header table contains a record of the statements produced when running the billing process.

**Note:** Implementation of this table in the Student Billing Statement process (TSRCBIL) addresses #CMS-RPE26121, #CMS-DFCT54060, and #CMS-DFCT89417.

<i>Name</i>	<i>Type</i>	<i>Nullable</i>	<i>Comments</i>
TBBSTMT_ STMT_NUMBER	INTEGER		Unique generated document number for the statement (AR_STATEMENT_SEQUENCE).
TBBSTMT_PIDM	NUMBER(8)		Internal Identification Number of the person or non-person account, valid in SPRIDEN.
TBBSTMT_BILL_ DATE	DATE		Date of the bill as specified by the parameter.
TBBSTMT_BILL_RUN	NUMBER		Run Number for bill as submitted via job submission.

<i>Name</i>	<i>Type</i>	<i>Nullable</i>	<i>Comments</i>
TBBSTMT_ USER_ID	VARCHAR2(30)		Oracle ID of the user who created or last updated the data.
TBBSTMT_ ACTIVITY_DATE	DATE		The last date this row was created or updated.
TBBSTMT_DATA_ ORIGIN	VARCHAR2(30)	Y	Source system that last created or updated the data.
TBBSTMT_TYPE	VARCHAR2(2)	Y	Type of statement requested, <i>ST</i> = student statement, <i>SB</i> = schedule bill.
TBBSTMT_SORT	VARCHAR2(2)	Y	Sort variable for printing. <i>00</i> - no address, <i>01</i> - valid address.
TBBSTMT_ TERM_CODE	VARCHAR2(6)	Y	Term for which the statement is produced, when processing schedule bill. Valid in STVTERM.
TBBSTMT_DUE_ DATE	DATE	Y	Due Date by which payment is requested.
TBBSTT_ATYP_ CODE	VARCHAR2(2)	Y	In combination with ATYP_SEQNO, the address where the statement will be sent.



<i>Name</i>	<i>Type</i>	<i>Nullable</i>	<i>Comments</i>
TBBSTMT_ATYP_SEQ NO	NUMBER(2)	Y	In combination with ATYP_CODE, the address where the statement will be sent. Combination valid and active in SPRADDR.
TBBSTMT_SORT_ZIP	VARCHAR2(10)	Y	Zip Code to which statement will be sent for sort by zip code.
TBBSTMT_SORT_ID	VARCHAR2(9)	Y	Identification Number of the entity receiving the bill for sort by ID.
TBBSTMT_SORT_ NAME	VARCHAR2(75)	Y	Name of the entity receiving the bill for sort by name
TBBSTMT_ SORT_CAMPUS	VARCHAR2(3)	Y	The campus location associated with the student for the term, populated if sorting schedule bill
TBBSTMT_ EMAIL_ADDR	VARCHAR2(90)	Y	Email address for the recipient of the bill.
TBBSTMT_ BALANCE	NUMBER(14,2)	Y	Balance of the account at the time of billing.
TBBSTMT_ PAST_DUE	NUMBER(14,2)	Y	Amount Past Due at the time of billing
TBGSTMT_AMOUNT_ DUE	NUMBER(14,2)	Y	Amount currently due in response to billing.

<i>Name</i>	<i>Type</i>	<i>Nullable</i>	<i>Comments</i>
TBBSTMT_ MINIMUM_DUE	NUMBER(14,2)	Y	Minimum payment due in response to billing if dynamic automated installment plan is calculated.
TBBSTMT_MEDIA_ID	INTEGER		Reference to Media ID of the centralized storage for binary large objects table (GORBLOB).

### Central Storage for Binary Large Objects (GORBLOB)

The new large object storage table can store files of many different types, which can then be downloaded to the end user via their browser. This table was designed for use with the `tb_statement` API that supports the new e-bill functionality, to store the individual statement files in PDF or other appropriate format. The Media ID assigned when creating a record in GORBLOB is captured in the Statement Header Table (TBBSTMT) to provide the link for subsequent access to the file.

### File Types stored as Binary Large Objects (GTVBLOT)

The correct file type must be specified when storing a file via the `LARGE_OBJECT` API, as the associated mime type specified in the validation table will be used when displaying the file.

For additional details regarding these new General tables and file storage, please refer to the *General Release Guide* and the API technical documentation of `LARGE_OBJECT`.

## Changed Tables

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### Accounts Receivable Billing Control Table (TBBCTRL)

Two new columns have been added to this table. The values in these columns indicate the number of months back that payment history for an account or billing statements can be viewed. Both values are initially set to 3 and can be altered by changing the value in the appropriate field on the Accounts Receivable Billing Control Form (TGACTRL).

<i>Name</i>	<i>Type</i>	<i>Default</i>	<i>Comments</i>
TBBCTRL_STMT_MONTHS	NUMBER(2)	3	Number of months of billing statement history enabled for view in Self-Service.
TBBCTRL_PAYHIST_MONTHS	Number(2)	3	Number of months of payment history displayed.

### Detail Charge/Payment Code Definition Table (TBBDETC)

One new column has been added to this table. If the value in this column is set to Y (display), transactions with this detail code will display in an account's payment history.

<i>Name</i>	<i>Type</i>	<i>Nullable</i>	<i>Comments</i>
TBBDETC_PAYHIST_IND	VARCHAR2(1)	N	Display transactions with this detail code in Payment History (Y = display, N = do not display)

## Changed Packages

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### **tokpva1.sql**

This script incorporates the following changes to TSRCBIL parameter validation.

- Adds a new parameter for the User ID (Parameter 09). This parameter identifies the ID of the person who runs the population selection.
- Ensures that the Due Date (Parameter 18) entered is greater than the Bill Date. (Parameter 19).
- Uses the Run Mode value as the indicator for the schedule bill format.
- Verifies that ID or COLLECTOR is not specified for Parameter 4 when running the TSRCBIL process in STATEMENT mode.
- Verifies that Parameter 22 (Create Contract, Exemption, and Deposit Credits) is set to Y in APPLYCRED mode.

### **tsksels.sql/tsksel1.sql**

A new function (`f_date_ctrl_months`) returns the cutoff date for Statement History or Payment History, based upon the new number of months to display columns (`tbbctrl_stmt_months` and `tbbctrl_payhist_months`) in the Accounts Receivable Billing Control Record (TBBCTRL)

## New Sequence

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### **tos\_stmt\_seq.sql**

This script creates a new sequence (AR\_STATEMENT\_SEQUENCE) which generates a statement number when TSRCBIL is run. TSRCBIL generates a unique statement number for each bill that it creates.

## New View

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### **tbvphst**

This new view returns data from the Accounts Receivable Detail table (TBRACCD) filtered by the detail codes specified for display as Payment History by the new `tbbdetc_payhist_ind` column.

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## Section 4 APIs - Technical

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### Overview

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The TB\_STATEMENT application programming interface (API) and supporting packages are delivered with this release. This API is a database package that contains the validation rules and other related processing for the table associated with student bills.

The TB\_STATEMENT API can be called by programs within Banner, such as forms, C processes, and Web packages, as well as by external systems when there is a need to insert, update, or delete information in the TBBSTMT table.

This API will interact with the LARGE\_OBJECT API (gb\_large\_object) to store a binary file. Please refer to the API Technical documentation of LARGE\_OBJECT for details regarding the parameters handling file storage.

For additional information about the TB\_STATEMENT API, refer to the API technical documentation.

### New Packages

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The APIs listed in the following chart process the Statements Produced Table (TBBSTMT).

<i>Type of API</i>	<i>Name</i>
Base API	tgkb_acctstmt0.sql/tgkb_acctstmt1.sql
Rules Package	tgkb_acctstmt_r0.sql/tgkb_acctstmt_r1.sql
Strings Package	tgkb_acctstmt_s0.sql/tgkb_acctstmt_s1.sql

## API Packages

<i>Object Name</i>	<i>Entity Name</i>	<i>Task Performed</i>	<i>Associated Table</i>	<i>Associated Forms &amp; Processes*</i>	<i>Associated Packages</i>
tb_statement	STATEMENT	The Common Business interface for the Statement API (STATEMENT).	Statements Produced Table (TBBSTMT)	Student Billing Statement (TSRCBIL)  Statement Purge Process (TGPSTMT)	tb_statement_str  Provides error messages and error message functions for STATEMENT.  tb_statement_rules  Provides supporting subprograms for STATEMENT.



## Section 5 Miscellaneous Enhancements

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This section identifies the enhancements to Banner Accounts Receivable made in Release 7.3.

### Flexible Dates

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Banner products are undergoing changes in order to comply with Internationalization (I18N) standards. One of these standards, flexible date formatting, requires that any hard-coded date formatting in Banner objects be replaced with functions that reference the appropriate date format.

To support this change, a process was run on all the forms and database procedures delivered with this release to find any hard-coded date formats, and then replace them with flexible date functions. As a result, the audit trail for all existing forms and procedures now contains an entry that indicates that the process was run.

Although the changes were made to forms and procedures as part of this release, flexible date functionality will not be fully implemented until a future release, when all objects have been modified and delivered.

For information about the infrastructure changes that make flexible formatting possible, refer to the *SCT Banner General 7.2 Release Guide*. For information about future flexible date functionality, refer to FAQ #1-49GE7, available in the Solutions section of the Customer Support Center.

### Automated Installment Plan Rules (TSAISTR)

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The logic to enable and disable options in this form was modified pursuant to changes to the General library (GOQRPLS).

### Automatic Credit Refund Amount Report - Student (TSRRFND)

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Previously, a student with Title IV reversals pending application may have caused the TSRRFND process to fail to complete. Now, if a student is bypassed for this reason, the TSRRFND process continues for other students and produces a message on the

Control Report to review the log file which identifies the PIDM for which Application of Payments is required.

Example:

Invalid line payment; Amount entered exceeds balance.  
processing PIDM 26

Invalid line payment; Applications pending reduce balance to 75.00.  
processing PIDM 63014

## RPEs

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TFRBILL	(#CMS-RPE47067) Now, when a Recurring Receivable cannot be created due to a missing address, a message identifies the entity and address that caused the problem.
TGRRCON	(#CMS-RPE38777) Added two new summary sections called the Account Summary and Deposit Summary to the report. These sections include a GL Balance column that displays amounts from the Finance General Ledger to assist with reconciliation to AR accounts. Refer to “Reconciliation Enhancement” on page 49 for more details.  (#CMS-RPE48829) Previously, query functionality was not readily available to identify all records associated with a given feed document from multiple Accounts Receivable tables.  Two new views delivered with this release (TBVDTAP, TBVDTTR) make data more accessible for reporting purposes. For additional information about these views, refer to “New Views” on page 61.
TSRCBIL	(#CMS-RPE25737) A blank page no longer prints between each schedule/bill when TSRCBIL is run in sleep/wake mode.
TSRCBIL	(#CMS-RPE26121) Statements and schedule/bills may now be stored for display on Self-Service.
TSRCBIL	(#CMS-RPE28101) The description of TSRCBIL on the Process Maintenance Form (GJAJOB) has been updated to exclude references to MICROFAIDS, since there is no longer an interface between AR and MICROFAIDS. Within the TSRCBIL process, cursors and variables previously used to read from TBTFADB in FINANCIAL mode or to calculate committed aid from AWD have been removed.

- TSRCBIL (#CMS-RPE24610)  
Three parameter options are now available to improve zero balance functionality. For detailed information about this enhancement, please refer to “Miscellaneous Enhancements to TSRCBIL” on page 33.
- TSRCBIL (#CMS-RPE2840)  
Added a new parameter to provide the option to update or not update the accept charges flags in registration and location management when credits are posted to account.
- TSRCBIL (#CMS-RPE47180)  
When a printer parameter was selected on TSRCBIL, it displayed on the Control Report with the label, “Collector File Selection Criteria”. The label has been changed to be more clear. It now reads, “Printer Destination.”

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## Section 6 Problem Resolutions

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This section identifies the changes made to Accounts Receivable in Release 7.3 to resolve system defects.

TBVRCP1,  
TGIRCPT

(# CMS-DFCT80456)

**Description:** Date queries on TGIRCPT were inconsistent with regard to time stamp.

**Impact:** The user was unable to query all types of receipts using the same date format.

**Resolution:** Code changes were made to truncate dates in the TBVRCP1 view that supports TGIRCPT. Date queries in DD-MON-YYYY format now return all matching records without regard to time stamp.

TBVRCP2,  
TGIRCPT

(# CMS-DFCT89548)

**Description:** When you queried using a Miscellaneous Receipt number, payment transactions associated with the Receipt number were not reflected on TGIRCPT.

**Impact:** You could not view the entire miscellaneous transaction.

**Resolution:** The TBVRCP2 view and TGIRCPT form were modified to include both the Pay (debit) and Charge (credit) records from TBRMISD, associated with a miscellaneous receipt.

TFAACCT,  
TFADEF,  
TFADETL,  
TFAISTL,  
TFAMASS,  
TFAMDET,  
TFAUNAP,  
TFIAREV,  
TFIAPPL

(# 1-6WIGJ)

**Description:** The Key Block ID function on this form was disabled when Banner Finance was not installed. The ID look-up pointed to FOIIDEN and FOICOMP search forms, which did not exist.

**Impact:** Users were unable to use the ID look-up on non-student Accounts Receivable forms when Banner Finance was not installed.

**Resolution:** When Banner Finance is not installed, the ID look-up on AR non-student forms points to SOAIDEN and SOACOMP.

TFAADSP

(#1-6WIGJ)

**Description:** The Key Block ID function on this form pointed to SOAIDEN and SOACOMP forms.

**Impact:** Users were unable to use the normal Finance ID look-up.

**Resolution:** When Banner Finance is not installed, the ID look-up on AR non-student forms now points to SOAIDEN and SOACOMP.

- TFADETF,  
TFADETL,  
TSADETF,  
TSADETL, (#1-4GY0R)  
**Description:** When a user attempted to release all or part of a deposit or memo at the same time that the initial record was created, the Release Amount was ignored.  
**Impact:** Users could not create and release a deposit or memo with the same Commit.  
**Resolution:** Users may create and release deposits or memos with a single Commit.
- TFARFND (# CMS-DFCT104682)  
**Description:** Insert statements did not include column names.  
**Impact:** The forms could not compile against a Virtual Private Database (VPD) since the insert statement did not explicitly specify column names.  
**Resolution:** The syntax of the insert statements was corrected to specify columns.
- TFRBILL (# CMS-13771)  
**Description:** Parameter 09, Entity Code to Process (or %), indicated that the percent sign was a valid value. If you used a percent sign for Parameter 09, however, no invoices were produced.  
**Impact:** If you used a percent sign for Parameter 09, no invoices were produced.  
**Resolution:** The percent sign now produces invoices for *all* entity codes.
- TFRBILL (# CMS-DFCT50810)  
**Description:** Previously, TFRBILL created bills showing inactive addresses.  
**Impact:** Addresses that printed on bills were no longer valid.  
**Resolution:** Now, if the address is inactive, the error message *Warning - No Address* displays on the bill. Note that bills are not produced at all for older addresses with no outstanding balance.  
Note that #CMS-RPE12873 remains open regarding zero balance functionality in TFRBILL, so that bills are not produced at all for older addresses with no outstanding balance.
- TFRBILL (# CMS-87296)  
**Description:** The process printed only part of the prefix and suffix.  
**Impact:** The prefix and suffix did not always print.  
**Resolution:** The prefix will always print and at least the first three characters of the suffix will print when the other name data is already very long.  
Also in TFRBILL, the major select cursors of the process were re-written to ensure that the process identifies the non-student accounts to be billed and efficiently joins to other tables for the additional information needed, in order to improve performance.

TFRBILL, TSRCBIL	(#CMS-14208) <b>Description:</b> The print definition table exceeded 80 characters, which caused some data to be truncated when printed.  <b>Impact:</b> Some data was truncated when printed.  <b>Resolution:</b> A Print Definition table was changed to 80 characters. The year in the detail section was changed from four characters to two characters (TFRBILL only). The ID, DUE literal, and Due Date were moved two characters to the left (both).
TFRRFND, TSRRFND	(# CMS-DFCT81178) <b>Description:</b> In refund mode, the city did not print if the student's address contained a nation code but no state code.  <b>Impact:</b> Address information in the report was incomplete.  <b>Resolution:</b> Now the City prints even if the student's address has no state code. Other corrections include the assignment of line limit via job submission and the incrementing of line number count for each address line.
TGIACCD	(# CMS-DFCT104981) <b>Description:</b> Scrolling caused the cursor to jump back to the first column of a record.  <b>Impact:</b> The cursor had to be repositioned on columns outside the scroll box, since the scrolling window returned to the first column each time a new record was accessed.  <b>Resolution:</b> The cursor retains its column position when the user navigates from one record to another.
TGIRCPT	(# CMS-DFCT37886) <b>Description:</b> Duplicate Miscellaneous Receipts requested via TGIRCPT did not update the collector table TBRCMIS.  <b>Impact:</b> The user could not request a duplicate of Miscellaneous Receipts using the TGIRCPT form.  <b>Resolution:</b> Duplicate Miscellaneous Receipts requested via TGIRCPT now update the collector table TBRCMIS.
TGIRCPT	(# CMS-DFCT104683) <b>Description:</b> Insert statements did not include column names.  <b>Impact:</b> The forms could not compile against a Virtual Private Database (VPD) since the insert statement did not explicitly specify column names.  <b>Resolution:</b> The syntax of the insert statements was corrected to specify columns.

- TGPBILL (# CMS-DFCT105808)  
**Description:** The Billing Purge process failed when creating balance forward records for non-student accounts when there was no default address.  
**Impact:** When TGPBILL was run to create balance forward records, and a non-student account with no default address in the customer profile was purged, the process failed with the error message: *Address Type and Sequence Number are both required for non-student transactions.*  
**Resolution:** The balance forward transaction for a non-student account now reflects the last valid address type and sequence used on the account. The control report reflects the number of accounts skipped due to a missing address.
- TGRCLOS (# CMS-DFCT-69859)  
**Description:** The Cashier Session Close Report (TGRCLOS) summarized negative charges and negative payments as positive.  
**Impact:** Payment and charge totals displayed incorrectly on TGRCLOS.  
**Resolution:** Changes were made to ensure that negative amounts are appropriately handled and correct amounts display on the report.
- TGRDETC (#CMS-DFCT40995)  
**Description:** Accounting distributions did not display on TGRDETC for clients who did not use Banner Finance. So, clients could not review accounting distributions or general ledger information on TGRDETC.  
**Impact:** Clients who did not use Banner Finance were unable to review accounting distributions using TGRDETC.  
**Resolution:** TGRDETC now displays accounting information for non-Banner Finance customers.
- TGRFEED (# CMS-DFCT105925)  
**Description:** TGRFEED failed if you change the Prefix value on FOASEQN for Document Type S.  
**Impact:** If you change the Prefix value on FOASEQN for Document Type S, TGRFEED failed and displayed an error message.  
**Resolution:** TGRFEED no longer fails if you change the Prefix value on FOASEQN for Document Type F (Interface documents or S (AR Invoices)).
- TGRRCON (# CMS-DFCT78881)  
**Description:** TGRRCON did not display all detail codes on the error report that were missing accounting distribution.



**Impact:** Not all detail codes missing accounting distributions were listed in the error section of TGRRCON.

**Resolution:** Changes made to code ensure that detail codes without appropriately dated records in both TBBEACT and the TBRACCT are identified, and that current accounting information is verified and listed on TGRRCON.

TGRRCON

(#CMS-DFCT93208)

**Description:** When the accounting included multiple rows with the same percentage, the percent displayed only once on TGRRCON so it appeared the records did not add up to 100%.

**Impact:** The sum of percentages on TGRRCON did not add up to 100%.

**Resolution:** Code changes ensure that all accounting rows display even when the rows have the same percentage.

TGRRCPY

(# CMS-DFCT103737)

**Description:** An extra comma printed after city for receipts using the default customer profile address.

**Impact:** Two commas printed after the city when the address was derived from the Customer Profile Definition Form (TGACPRF).

**Resolution:** Since formatting of the city, state, and zip adds a comma before printing, the comma concatenated in `get_def_addr` was removed.

TGRRCPY

(# CMS-DFCT76791)

**Description:** Date did not print for deposits.

**Impact:** The date was not shown when the receipt for a deposit printed.

**Resolution:** The transaction date prints if populated; otherwise, the effective date prints for a deposit.

TSARFND

(# CMS-DFCT104684)

**Description:** Insert statements did not include column names.

**Impact:** The forms could not compile against a Virtual Private Database (VPD) since the insert statement did not explicitly specify column names.

**Resolution:** The syntax of the insert statements was corrected to specify columns.

TSATXR

(#1-C16WS)

**Description:** Making changes to term codes on TSATXR did not trigger a recalculation by TSP1098.

**Impact:** Student accounts were not recalculated for 1098T processing.

**Resolution:** Code changes ensure that changes to term codes initiate a recalculation by TSP1098.

TSATAXR

(# CMS-DFCT104685)

**Description:** Insert statements did not include column names.

**Impact:** The forms could not compile against a Virtual Private Database (VPD) since the insert statement did not explicitly specify column names.

**Resolution:** The syntax of the insert statements was corrected to specify columns.

TSAUNAP,  
TFAUNAP

(#1-C050M)

**Description:** There was a performance issue under CBO with the unapplication of transactions.

**Impact:** When you entered a transaction number to unapply transactions, the process took minutes to complete.

**Resolution:** The structure of the indexes on the Detail Application of Payments table (TBRAPPL) has been changed so that only those records associated with a particular PIDM need to be considered when applying or unapplying transactions. Three indexes (TBRAPPL\_PIDM\_INDEX, TBRAPPL\_PAY\_INDEX, TBRAPPL\_CHG\_INDEX) were replaced with TBRAPPL\_PIDM\_PAY\_INDEX and TBRAPPL\_PIDM\_CHG\_INDEX.

TSR1098

(#1-B17EX)

**Description:** The vendor name and email address was outdated in the T-record of the `irs1220.dat` file.

**Impact:** The vendor name and email address was not current in the T-record of the `irs1220.dat` file.

**Resolution:** Updated vendor name and e-mail address in the T-record of the `irs1220.dat` file to reflect SunGard Higher Education as the software vendor.

TSRCBIL

(# CMS-DFCT89417)

**Description:** TSRCBIL did not create a schedule/bill for a student when printing in Zip/Postal Code, Name order if the student did not have an address on SPAIDEN with the requested address type.

**Impact:** TSRCBIL only created a schedule/bill for a student when printing in Zip/Postal Code, Name order if the student had an address on SPAIDEN with the requested address type.

**Resolution:** Restructured the selection of students, their address, and the print to ensure that schedule/bill is printed for students that do not have the requested address on SPAIDEN.

- TSRCBIL (# CMS-DFCT96035)  
**Description:** The student schedule/bill did not always print the instructor name.  
**Impact:** The schedule bill did not include the instructor when the primary instructor was not associated with the first meeting session.  
**Resolution:** Code changes ensure that the instructor prints, even if the primary instructor is not associated with the first meeting session.
- TSRCBIL (#CMS-DFCT90475)  
**Description:** The name prefix and suffix do not print in schedule/bill mode.  
**Impact:** Prefix and suffix are missing.  
**Resolution:** Prefix will always print and at least the first three characters of the suffix will print when other name data is already very long.
- TSRCBIL (#CMS-DFCT54060)  
**Description:** There are performance problems when TSRCBIL is run in ZIP code order without a population selection.  
**Impact:** When not using population selection, and especially when sorting by zip code, TSRCBIL may have a long run time.  
**Resolution:** The process now separates the steps to select accounts, select addresses, and sort for printing in order to improve performance.
- TSRCBIL (# CMS-DFCT98561)  
**Description:** When TSRCBIL was run with a specific ID and “Print a control report” was set to Y, a control report did not print.  
**Impact:** A control report did not always print when requested.  
**Resolution:** Changes have been made to ensure that a control report is printed when the print a Control Report parameter is set to Y.
- TSRRFND (# CMS-DFCT83096)  
**Description:** When TSRRFND was processed in Refund Update mode for All credits, the system did not reset the refund indicators to NULL that were set to Y in FLAG mode when the account no longer qualified for a refund.  
**Impact:** Subsequent runs of TSRRFND continue to show students who no longer qualify for a refund.  
**Resolution:** If an account with the refund indicator set to Y is bypassed due to minimum balance or TIV/All choice, the system resets this indicator to NULL.

TSRRFND	(# CMS-DFCT104164) <b>Description:</b> Parameter 04 (Minimum Account Balance) needed to be corrected to match the documentation, which read: "Minimum amount the account balance must equal to be considered for this run." <b>Impact:</b> TSRRFND only refunded balances that exceeded the value in Parameter 04. <b>Resolution:</b> Now the process will create the refund if the credit balance is less than or equal to the value in Parameter 04.
TSRTBIL	(# CMS-DFCT72416) <b>Description:</b> The printing of student text messages caused charges/credits columns to indent. <b>Impact:</b> When student text messages printed on the statement or invoice, the charges and credits columns that printed for subsequent students were out of alignment. <b>Resolution:</b> Alignment of columns and their associated headings on the statement or invoice has been corrected.
TSRTBIL	(# CMS-DFCT86097) <b>Description:</b> Schedules printed with third-party bills sometimes had a course line repeated. This happened when there were multiple meeting times for the section. <b>Impact:</b> A course line sometimes printed twice for schedules printed with third-party bills. <b>Resolution:</b> Code changes ensure that, when multiple schedule rows are found for a CRN and meeting detail is not included, only the first schedule row prints.
TTKMOD1	(#1-92GJC) <b>Description:</b> When running the 1098-T process under Oracle 10g, dollar amounts from reversal entries made to a student account for qualified expenses and scholarships/grants appeared in the wrong box. <b>Impact:</b> Under Oracle 10g, the reported amounts were sometimes not correct. <b>Resolution:</b> An ORDER BY clause was corrected to explicitly sort records correctly when calculating the reportable amounts.
TGKB_ DEPOSIT1.SQL	(#1-5QG53) <b>Description:</b> When a deposit record was found, but other data prevents the Auto Release functionality, the return message contained Amount Released = 0, but did not include the Amount Retained or the Reason for Retention.

**Impact:** When attempting to Auto Release deposits, would not receive indication of Retained amount if the deposit balance equals the minimum amount and the expiration date is still in the future.

**Resolution:** If the Auto Release amount is .00 because the deposit balance equals the minimum amount (expiration date future), this minimum is now added to the amount retained. If the specific release request is .00 and a balance remains, the remaining balance is now added to the amount retained.

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## Appendix A Frequently Asked Questions (FAQ)

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This section includes guidance on questions that may be encountered as you implement the e-Bill functionality to store and view statement files.

### Do I have to create Adobe Portable Document Format (PDF) files to use the e-Bill enhancement?

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No, it is not a requirement that the PDF format be used, only that the output from TSRCBIL be divided into multiple files - one per statement. The plain text output from the billing process may be parsed, stored, and viewed.

However, the conversion to PDF allows for a much better presentation of the statement through the addition of graphical elements including column separators and the branding of this important communication with your logo. Since third-party tools exist to perform this conversion, SunGard Higher Education has not attempted to recreate this functionality.

### How can I parse the TSRCBIL output into multiple files?

---

Each statement includes a unique number (although there may be more than one page for a statement), and it is recommended that this number be used to name the individual files as they are parsed.

Here is an example of a Perl script that can be used to perform the parsing of the TSRCBIL output. Note that the correct value must be set for the `$stmt_line` variable depending on whether you are parsing STATEMENT or SCHEDSTMT output. If the page break appears as something other than CTRL-L in your output, the escape sequence needs to be changed in both places it occurs.

#### Sample Perl Script

```
#!/usr/bin/perl
#
# parse_cbil.pl - splits tsrcbil output into separate files,
# basing the file names on the stmt_number in the output.
# For STATEMENT mode, initialize $stmt_line = 3; to find the stmt_number
# on the 3rd line of each page.
# For SCHEDSTMT mode, initialize $stmt_line = 58; to find the stmt_number
# on line 58 of each page. If you have changed the BLANK_PAPER_line
# definitions in the TSRCBIL source code, adjust this value as needed.
# Note that the script is searching for CTRL-L as a page break using \cL
```

```
# in two places below. Change as necessary for the environment.
#
# Usage is: perl parse_cbil.pl <tsrcbil_nnnnnnn.lis
#

open (SLOG, ">>tempfile.lis")||die "Cannot open temp file out\n";
$stmt_line = 3;
$i = 0 ;
$k = 0 ;
while (<STDIN>) {
    $i++;
    if ($i==$stmt_line)
    {
        @fields = split;
        $fname=$fields[0];
    }
    if (/\\cL/)                # Start of a page
    {
        if ($k==1)            # Continue writing multi-page statement
        {
            print SLOG $_;
            $i = 1 ;
            $k=0;
        }
        else                    # Close and rename file, start next file
        {
            close (SLOG);
            # rename it to the correct name
            rename ("tempfile.lis","${fname}.lis");
            # open next
            open (SLOG, ">>tempfile.lis")||die "Cannot open temp file out\n";
            $i = 1 ;
            $_ =~ s/\\cL//;      # Omit the page break
            print SLOG $_;      # Print the line out
        }
    }
    elsif ((/ * CONTINUED /) && ($i > 8))
    {
        $k=1;                  # Mark as multi-page statement
        print SLOG $_;
    }
    elsif (/REPORT CONTROL INFORMATION /)
    {
        $fname="control";      # This is the Control Report
        print SLOG $_;
    }
    else
    {
        print SLOG $_;        # Print the line out
    }
}
close (SLOG);
rename ("tempfile.lis","${fname}.lis");
```

## How can I Store Statements from the File System?

---

Once individual files for each statement have been created, use **BANINST1** to create an Oracle directory that points to the folder where the files are located. Grant read access as necessary if a user other than **BANINST1** will run the script:

```
create or replace directory AR_LOAD_DIR
as '/server/banner/dataload/ar';
create public synonym AR_LOAD_DIR for AR_LOAD_DIR;
```



```
grant read on directory AR_LOAD_DIR to <my-user>;
```

## PL/SQL Script

The `tb_statement` API is used to store each file in the database. This example is for Plain Text files, assuming that the `tsrcbil.lis` output was parsed into files named `<stmt_number>.lis`. It uses the Job Submission number from the TSRCBIL run to identify all of the statement numbers produced, and updates the record with the file with that number:

Be sure to use the correct large object type (`p_blot_code`) for the file being stored, as this determines how the browser will display the file when it is viewed.

```
set echo off;
set serveroutput on;
ACCEPT bill_run_in PROMPT 'Enter Job Submission Number '

DECLARE
    lv_file_name          VARCHAR2(30);
    stmt_refcur           tb_statement.statement_ref;
    stmt_rec              tb_statement.statement_rec;
    bill_run              tbbstmt.tbbstmt_bill_run%TYPE;
    lv_count              NUMBER := 0;
    COMMIT_POINT CONSTANT PLS_INTEGER := 10;

BEGIN
    bill_run := &bill_run_in;

    stmt_refcur := tb_statement.f_query_all(
        p_bill_run => bill_run);

    LOOP
        FETCH stmt_refcur INTO stmt_rec;
        IF stmt_refcur%FOUND
        THEN
            IF stmt_rec.r_media_id IS NULL THEN
                lv_file_name := TO_CHAR(stmt_rec.r_stmt_number)||'.lis';
                tb_statement.p_update(
                    p_stmt_number => stmt_rec.r_stmt_number,
                    p_user_id     => 'APITEST',
                    p_data_origin => 'STATEMENT_LOAD',
                    p_blot_code   => 'TXT',
                    p_directory   => 'AR_LOAD_DIR',
                    p_filename    => lv_file_name,
                    p_loadfromfile => 'Y');
            END IF;
            lv_count := lv_count + 1;
            IF lv_count > COMMIT_POINT THEN
                gb_common.p_commit;
                lv_count := 0;
            END IF;
        END IF;
        EXIT WHEN stmt_refcur%NOTFOUND;
    END LOOP;
    CLOSE stmt_refcur;
    gb_common.p_commit();
EXCEPTION
    WHEN OTHERS THEN
        gb_common.p_rollback();
        dbms_output.put_line('Error processing statement:'||
            stmt_rec.r_stmt_number);
        DBMS_OUTPUT.PUT_LINE(SQLERRM);
END;
```

**Note:** If you prefer to keep the files in the physical file system you could do so by changing the value of `p_loadfromfile` above to `V` (validate) or `N` (No validation) in order to store only a file location pointer in the database.

Please refer to the *General Release Guide* and the technical documentation for additional information about the file storage parameters and options available for handling the statement files.

## How might local modifications or Third Party tools be used in processing statements?

---

Handling statements for the e-Bill enhancement has three basic steps, two required and one optional.

1. Create individual statement files. (required)
2. Enhance and brand the output, convert to binary file type. (optional)
3. Store the file. (required)

Local modifications or tools from other vendors might help with any or all of these steps.

For step 1), if a local process has been written to do the billing, it might be modified to use the `tb_statement` API to generate a statement number. The output could be a single file including the statement number, or the process might be altered to create individual output files named with the statement number. For either baseline TSRCBIL or a local process creating one file, a third-party tool that can parse a plain text file could be used in place of the Perl script above to create the individual files.

For step 2), any tool which can read a plain text file, enhance it with user-defined changes, and create a binary document file with which the resulting output can be used. A tool that can do steps 1) and 2) together simplifies the processing.

For step 3), any tool that can communicate with the Banner database through a PL/Sql block can use the `tb_statement` API to store the file. The sample script above shows the basic form such a call would take as an update to an existing record in `tbbstmt`.

For additional information, please refer to the following FAQs available in the Solutions section of the Customer Support Center: FAQ #1-IHS99 and FAQ #1-IPPO9.

## Why do I see the same statement when I try to look at a different bill date?

---

Your Internet Options can affect your ability to view statements. If you are having difficulty viewing the statement you selected, access the Internet Options for your browser and check the following.

1. Ensure that your preferences for temporary file handling are set up to look for newer versions of stored pages.
2. Clean out the cache.

*Why do I see the same statement when I try to look at a different bill date?*

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# Appendix B Sample PDF

Following is an example of a student statement in PDF format.

**SUNGARD<sup>®</sup>**  
**HIGHER EDUCATION**  
 www.sungardhe.com

Accounts Receivable  
 18818 Teller Avenue  
 Suite 250  
 Irvine, CA 92612  
 Phone: 888-533-5993

Student ID: EBILL  
 Student Name: ShowMe MyBill

Semester: Spring 2005-2006

Due Date: 12-FEB-2006  
 Amount Due: \$ 275.00

TERM	DATE	DESCRIPTION	CHARGES	CREDITS
		* PREVIOUS BILLED BALANCE *	13,425.00	
		- CURRENT CHARGES -		
INVOICE	NUMBER -	S0002975		
200620	11-JAN-06	Parking Fee, East Lot	275.00	
	06-JAN-06	- CURRENT PAYMENTS -		
	06-JAN-06	Federal Direct Stafford Loan		2,350.00
	06-JAN-06	Scholarship Fund		2,000.00
	08-JAN-06	Check		5,075.00
		* CURRENT BILLED BALANCE *	275.00	
PAST DUE: .00		FUTURE BALANCE: .00	TOTAL DUE: \$	275.00

VISA, Master Card, and Discover card are accepted. Last names beginning with A - K, contact Ms. Uoweme at (888) 533-5993; L - Z, contact Mrs. loweu at (888) 533-5993 x235. All bills must be PAID IN FULL before final exams can be taken. For bills paid by personal check, please include student's name, Id number, driver's license no. and phone number of check writer.

If you would like to review your bill between statements, please visit our website at www.sungardhe.com.

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PLEASE CUT ALONG THE LINE AND RETURN THE PORTION BELOW WITH PAYMENT

ShowMe MyBill  
 123 Main Street  
 Malvern, PA 19355

ID #: EBILL  
 TERM: 200620  
 DUE DATE: 12-FEB-2006  
 AMOUNT DUE \$ 275.00  
 AMOUNT ENCLOSED \$ \_\_\_\_\_

SunGard Higher Education  
4 Country View Road  
Malvern, PA 19355  
1-800-223-7036  
[www.sungardhe.com](http://www.sungardhe.com)