

TIPS & TECHNIQUES

A SFMS Desk Manual

R*STARS: OTHE.1
02/02/05

ERROR CORRECTION

R*STARS can process transactions in a batch mode or an on-line mode. All transactions are entered or interfaced in batches and all batches must be preceded by a **Batch Header Entry (500)**. Understanding some information contained in the Batch Header Entry is essential to the error correction process.

The Batch Header Entry screen must be accessed before any of the transaction entry screens will be available for entries. It contains information that determines:

- The transaction entry screen which will follow.
- How the batch will be processed.
- The error correction procedures to follow.

The Batch Header Entry contains four fields that constitute the **Batch Key**, which uniquely identifies each batch. The concept of identifying a batch is important for error correction. When an error occurs within a batch and the batch is recalled for correction, the Batch Key will be used to select the appropriate batch. The Batch Key consists of Batch Agency, Batch Date, Batch Type and Batch Number.

The **Batch Agency** field defaults from the system and references the agency that is entering the batch.

The **Batch Date** also defaults from the system and references the date the batch is entered.

The **Batch Type** field indicates the types of transactions in the batch and determines which Transaction Entry screen will follow.

<u>Batch Type</u>	<u>Screen Displayed</u>	<u>Screen ID</u>
1	Budgetary	503
2	Revenue/Receipts	504
3	Pre-Encumbrance/Encumbrance	505
4	Expenditures/Disbursements	505
5	Journal Vouchers	501
G	Companion Transactions	509

Within a single batch, more than one transaction code can be used, but only one **type** of transaction.

The agency assigns the **Batch Number**. A sequential numbering system and the use of a log for controlling batch numbers are encouraged.

Although the initial Batch Header Entry screen does not show a **Sequence Number**, the system assigns the Batch Header Entry a Sequence Number of “00000” after the header is saved. Each transaction in the batch is also assigned a Sequence Number starting with “00001”. Just as each batch is identified by the Batch Key (agency, date, type, and number), each transaction within a batch is identified by the Batch Key plus the Sequence Number.

The Sequence Number is an important part of error correction. Just as the Batch Key is used to recall the batch for correction, the Sequence Number is used to recall a specific transaction within the batch.

Batch Count and **Batch Amount** fields are optional and can be used as an additional control to ensure that all the transactions in a batch have been entered into the system. If an entry is made into these fields, the system will compare these with the Entered Count and Entered Amount sums of all transactions within the batch. If the amounts do not agree, an error message will appear when the attempt is made to balance the batch. Amounts must be entered with the decimal point or with trailing zeros. R*STARS will right justify all entries without an entered decimal point. If you intend to enter “\$240.00” and type “240” into the amount field, the system will read “2.40”.

The **Batch Edit Mode** indicator is part of the security in R*STARS and determines a user’s ability to edit entries in the system. It defaults from the users R*STARS Security Profile (96A). A user with a high level of security has the ability to lower their security by changing their edit mode in the batch header. A user with a low level of security cannot change their edit mode to reflect a higher level of security.

Data Element edits and **Financial edits** are the two types of edits performed by R*STARS.

- Data Element edits compare the coding fields on the transaction against profiles for valid data. An example of a Data Element edit would be comparing the vendor number entered on the transaction entry screen against the Vendor Profile.
- Financial edits compare financial fields on the transaction entry screen to budgetary constraints in the system. An example of a financial edit would be comparing the amount entered on an encumbrance transaction against the Agency Budget for that agency.

Edit Modes

Edit Mode “0” - Data Entry Only is the lowest level of security and would be used when a large number of transactions are being entered or the data entry operator does not have the responsibility for error correction. Some interface batches are transmitted in edit mode “0”. In Edit Mode “0”:

- Data Element edits are not performed until the nightly processing cycle is run. Data Element errors will appear on-line and on the DAFR2151 Error Report.
- Financial edits are not performed until the nightly processing cycle is run. Errors will appear on-line and on DAFR2151 Error Report.
- Financial Tables are not posted until the nightly processing and after all the edits are passed.
- On-line only a limited number of edits are performed. For example, the transaction would be edited for an entry in the Amount field.

Edit Mode “1” - Master Edit Only represents the middle level of security where some on-line edits are performed. Most interface batches are transmitted in edit mode “1”. In Edit Mode “1”:

- Data Element edits are performed on-line and must be corrected before the transaction can be saved.
- Financial edits are not performed until the nightly processing cycle is run. Financial errors will appear on the DAFR2151 Error Report.
- Financial Tables are not posted until the nightly processing and after all the edits are passed.

Edit Mode “2” - Edit and Post is the highest level of security for editing and posting. In Edit Mode “2”:

- Data Elements and Financial edits are performed on line and errors must be corrected before the transaction can be saved.
- Financial Tables are posted immediately after saving the transaction.

Edit Mode “3” - Batches with Errors edit mode cannot be manually entered on the Batch Header Entry screen. This edit mode is system assigned to a batch entered with Edit Mode “0” or “1” which, in the overnight process, was found to contain errors.

At month-end close, the Thursday night before the Friday month-end is the last day an Edit Mode “3” batch can be on the 530 screen with an effective date for the closing month. Batch cycle runs after month-end close data changes (97 and/or 25 screens). Edit Mode “3” batches, with closing months effective dates still remaining by the Friday before month-end close, will need to be have the effective dates changed to the current month.

Edit Mode “4” - Waiting Approval or Payment is also a system generated Edit Mode and is assigned to transactions waiting for approval or payment.

Availability of Error Messages

	<u>Data Element Edits</u>	<u>Financial Edits</u>
Edit Mode 0:	next day	next day
Edit Mode 1:	immediately	next day
Edit Mode 2:	immediately	immediately

Error message definitions can be looked up on the 90 screen (News/Help Table). At the Keyword field, type in the three-character error code received and press enter.

Error Correction Procedures for Batches

For transactions entered with an **Edit Mode “0”**, the Data Element edits and Financial edits are performed during the nightly processing and, therefore, errors are not identified until the next day. Errors can be accessed on-line or on error reports. To correct the errors:

1. Link To the **View Batch Headers (530)** screen. The 530 allows a user to view and select a batch for correction. Users can Include or Exclude batch types by entering a batch type and an “I” or “E”.
2. The column MODE, on the 530 screen, is the Batch Edit Mode that appears on the Batch Header Entry. The system will assign a mode of “3” to any batch entered with a batch mode of “0” containing an error found in the overnight process. Enter an “S” (for select) next to an edit mode “3” batch. Press F7 to view a listing of the transactions in the batch. (This batch will remain a Batch Edit Mode of “3” until all errors are corrected and the nightly processing has run.) The View a Batch (520) screen will appear. This screen allows a user to view all the transactions in the batch and to select one for error correction.
3. Enter an “S” next to the first transaction to be corrected. Press F11. The **Recall a Batch for Correction (510)** screen will appear. This screen looks like the Batch Header Entry, except that the sequence number of the selected transaction appears below the Batch Number. (If the Batch Header Entry contains errors, they can be corrected from this screen by pressing F2.)
4. From the 510 screen, press F4. The original transaction entry screen will appear with error codes displayed at the bottom of the screen. (The News/Help Table (90) screen can be used to identify the error messages. Type in the error code and press enter.)
5. Errors can be corrected by entering a valid code into the appropriate field, or by using the **Data Element Help** feature. Data Element Help is available for the following fields:
 - Vendor Number and Mail Code
 - Vendor Name
 - Index
 - PCA
 - Comptroller Object
 - Agency Object
 - A. To use the Data Element Help feature, place the cursor in any of the above fields in the data entry screen. Press F1. (Note: to find Vendor Numbers, place the cursor in the Vendor Name field.)
 - B. From this screen, select a valid code by placing an “S” next to the selection. Press F9. The system takes the selected code and places it on the transaction entry screen.
6. After each error is corrected, press F10 to save the transaction. Even if all the errors are not corrected, pressing F10 clears the screen of the resolved error messages.
7. When all errors in a transaction have been corrected and saved, press F5 to move to the next transaction.
8. Once all the errors within a batch have been corrected and saved, the batch must be balanced and released. Batch balancing information is covered later in this document.

For transactions entered with an **Edit Mode “1”**, the Data Element edits occur on-line and must be corrected before the transaction can be saved. For Data Element errors follow the steps for Edit Mode “2” below. The Financial edits occur in the nightly processing and are not

available for correction until the next day. Financial edit errors are the result of transactions trying to overspend budgetary constraints. Correcting these errors usually involves a management decision to either re-code the transaction to a different coding block or adjust budgets. Adjusting budgets is beyond the scope of this document.

For transactions entered with an **Edit Mode “2”**, all edits are performed on-line and must be corrected before the transaction can be saved.

1. Errors can be corrected by entering a valid code in the appropriate field, or by using the Data Element Help feature. Data Element Help is available the same as shown in Step 6 of Edit Mode “0”.
2. After each error is corrected, press F10 to save the transaction. When all the errors are corrected for the transaction, pressing F10 will move you on to a new transaction entry screen.

Batch Not in Balance error appears after R*STARS performs the two batch balancing edits.

1. The system checks the count and amount fields entered on the Batch Header Entry against the sums (Computed Amount and Computed Count) of all the transactions in the batch. If the count or amount values were not entered on the Batch Header Entry, this edit is not performed. If the error “Batch not in Balance – cannot be released” is received, check to be sure:
 - A. Since the calculated batch amount:
 - Does not recognize any negative or “R” transactions – these amounts should be added to, not subtracted from the batch amount (absolute amounts are used).
 - Includes only the child transaction in a RTI. Batches with RTIs will not include the parent transaction in the batch balance.
 - B. The batch header entry and the entered amounts match computed count and amount:
 - Select the batch on the 530 screen. Press F7. At the View a Batch (520) screen, add the transactions – making sure to follow the rules above under “The calculated batch amount”. Change the entered count and amount to match the computed. Save, balance, and release the batch.
 - Delete the entered count and amount on the Batch Header Entry. Save, balance, and release.
2. The system totals the amount fields of each transaction in a document and compares it against the document amount. It is possible for numerous transactions (suffixes) to be in a single document and for numerous documents to be in a single batch. The more transactions in each document and the more documents in a batch, the more difficult the batch balancing process can become. For example, if a batch contained the following transactions, and no count or amount values were entered on the Batch Header Entry, the batch would not balance.

<u>Document Number/Suffix</u>	<u>Transaction Amount</u>	<u>Document Amount</u>
VP111111 001	100.00	600.00
002	200.00	600.00

	003	300.00	600.00
VP222222	001	75.00	75.00
VP333333	001	150.00	250.00
	002	100.00	250.00
	003	100.00	250.00

This batch would not balance because of document VP333333. The transactions within the document total to 350.00, but the Document Amount entered is 250.00. In this batch, the Document Amount fields would have to be changed and those transaction saved by pressing F10.

Possible solutions for documents being out of balance (where the transaction(s) amounts do not equal the document amount):

1. For Balanced Transactions (BT) the document amount has to be zero and the document agency has to be the same on both sides of the transaction. This is especially important on transfers to other agencies. The originating agency will sometimes mistakenly change the doc agency when they change the financial agency on the “other” agency’s transaction. Changing the doc agency creates a document header on the 37 screen for each agency and the document does not balance. These cannot be changed since the document agency is part of the document key. To correct – delete and re-enter.
2. For split (RTI) transactions, the parent document has to equal the children (splits).
3. If there is an “R” reverse code entered on one or more of the transactions, the amount of that transaction should be subtracted from, not added to the document balance. This may result in a negative document amount.
4. During the fiscal year change over period (June-July until June is closed) – confirm that all transactions (and suffixes) have the same effective date to make sure the document is not split between two fiscal years. This would cause the document to be out of balance since there would be two headers (one for each fiscal year). These cannot be fixed – delete and re-enter.
5. There is a potential of a document being out of balance if reclassifying a transaction using non-balanced transaction codes and the “A/S Doc Amt” indicator on the 28a profile on both transaction codes is either positive or negative.

To correct batch balancing problems:

1. After pressing F6 to balance, the **Batch Balancing** screen will be displayed. A message at the bottom will indicate a successful balancing or an out-of-balanced condition. If the batch is not balanced, press F2, Recall Batch.
2. The Recall a Batch for Correction (510) screen will display. Press F4 (Change). The transaction entry screen for the first transaction will be displayed.
3. For each **Document Number**, compare the Transaction Amount and the Document Amount. When a discrepancy is discovered, make the necessary correction and press F10 to save the transaction. Press F5 to scroll through the batch.
4. After correcting and saving the transactions, press F6 to balance.

Helpful hints for batch balancing:

- Small batches are better.
- If you have large batches with multiple transactions within documents, the **Document Tracking Inquiry (37)** screen can help find the documents that are out of balance.
- The system looks at the first document amount within a document number. If you need to make a correction to a document amount, only change the document amount for one of the transactions within that document number, the rest will change automatically.

To correct multiple errors within a batch or to change the batch effective date, the 54 series of screens can be used. The 54A, 54B, 54C, and 54D screens are used to correct errors on a larger scale than the procedures described previously (there is no 54 screen). For more detail instructions, see the R*STARS Training Program manual, pages 8-24 through 8-27. (Whether a user class can correct a batch using the 54 series will depend on the transaction code being used.) To use the 54 series:

Type "54A" in the Link To field and press Enter. The **Batch Header Correction (54A)** screen will appear. The 54A will list only the batches containing uncorrected errors and here the user can select a batch for correction.

A. To post immediately (this will not work at year-end):

1. Type "S" in the SEL column to select a batch. Press **F5**. The **Detail Correction (54B)** screen is displayed with the Batch Key information from the selected batch. The 54B allows the user to correct errors by entering the sequence number of the transaction, a field identification code representing the field to be corrected, and the correct values.
2. Type "S" in the SEL column of the 54B. Type the sequence number of the transaction to be corrected. Place the cursor in the **FID** field (**Field Identification**). Press F4. The **Valid Field ID Values (54C)** screen will display. To select a field for correction, tab the cursor to that field and press F2. The 54B screen will be displayed with the selected FID carried from the 54C.
3. In the column to the right of the FID, enter the correct value. Repeat this procedure until all the errors in the batch have been corrected. Press **F10** to save the corrections. These changes will post now instead of overnight. If there is a problem with the user class, a security violation will occur now.

B. For overnight processing and at year-end:

1. Type "S" in the SEL column to select a batch. Press **F6**. The **Detail Correction (54B)** screen is displayed with the Batch Key information from the selected batch.
2. Type "S" in the SEL column of the 54B. Type the sequence number of the transaction to be corrected. Place the cursor in the FID field. Press F4. The

Valid Field ID Values (54C) screen will display. To select a field for correction, tab the cursor to that field and press F2. The 54B screen will be displayed with the selected FID carried from the 54C.

3. In the column to the right of the FID, enter the correct value. Repeat this procedure until all the errors in the batch have been corrected. **Press F11** to save the corrections. These changes will post overnight. If there is a problem with the user class, it will not be known until overnight.

C. To change a batch effective date:

1. Type "S" in the SEL field by the batch to be corrected. Cursor **moves to the FID** field. Press **F4**. The Valid Field ID Values (54C) screen will display for this field. Place cursor on 75 and press F2. The 54A screen will be displayed with the selected FID carried from the 54C.
2. Move the cursor to the Correction Value field. Type in the correct effective date in xx/xx/xx format. Press **F10**. The batch effective date is now changed.

Interface batch (payroll, cost allocation) has been on the 530 screen and now you must change the effective date of the transactions. You make the change. It does not clear and there is nothing else wrong. The reason the batch did not process is the batch header also has an effective date on it (which you cannot see on-line). The effective date on the batch header is what triggers the batch to process. Payroll batches work this way: when the batches are interfaced that first night they don't process even though they are brought in on cycle A and could process in cycle B. They are waiting for the effective date on the batch header which is the same as the ACH stop date in payroll, usually the day after they're interfaced. That's why they start processing on the 2nd day or when the batch effective date is the same as the current system management date. Agency interfaces could potentially work the same way if they by accident use a future effective date on the batch header. The 54a screen (detailed above) would be used to change the effective date on the header.

If **all the transactions in a batch contain the same error**, it is not necessary to correct this error by entering the sequence number for each transaction. Instead:

1. Leave the Sequence Number field blank.
2. Enter the appropriate Field Identification (FID).
3. Enter the correct value.
4. Press F11 (Mass Change).

The capability of the system to do this type of mass correction is limited to 1,000 transactions. If the number of transactions to be corrected using the Mass Change feature exceeds 1,000 transaction, the **Batch Detail Correction (54D)** screen must be used. Link To the 54D, complete the FID column and the Correction Value column. Press F10 to change the values in the appropriate fields.

The **"Warning, Possible Batch in Progress"** error usually means that someone else has accessed the batch and did not exit it in the proper manner, which would be F6 (balance) and clear out. *(To check - press F6. Look at the User ID and User Class fields. This person is*

considered the batch originator at this time.) To be able to continue, that person's user's ID needs to be removed from the batch. To do this:

1. Select the batch from the 530 screen. Press F11 – correct batch. This brings up the 510 screen. Press F11 – re-compute.
2. Type a sequence number in the sequence number field. Press F5 –view. Then press F7 – details. Press F6 – balance. You should now be able to update batch.
3. If the error message is received any time during this process, press the same function key just selected prior to getting the error message again.

There have been instances where an individual did not exit the batch, another individual releases the batch, and the original individual not knowing this and still having the batch open, adds more documents to the batch. These added documents will not have an approval date. This has happened with disbursement batches that will result in no warrants being issued for the non-approved transactions. To fix this, delete the added transactions. Or, the releaser can get the batch put back on hold, recompute, balance, and release the batch.

Corrections for R, W, and Payroll type batches are monitored by SFMS Operations. Batches that require pca, index, grant, fund, appn#, AY, effective date, etc changes will be evaluated by SFMS Operations for appropriateness. (Payroll batch types 8 with transaction code 850 are corrected by the agencies.) For R and W type batches that have vendor problems or ref doc error, SFMS Operations will make the changes without an email from the agency. SFMS Operations will work with BAM to clear the E5B errors on an R batch without receiving an email from an agency. If agencies have effective date errors, such as pca/index effective date errors, once the agency has activated the pca/index, SFMS Operations will release the batch.

When the **warrant was not generated** and the voucher batch is still on the 530 screen, the agency should check the following:

- Was the batch released? Does the 37-screen show that it was released (code 200)?
- Has the due date arrived yet? In addition, has the cycle run since the due date? Also, watch out for future years on the due date, especially at the beginning of the year.
- Is there enough cash to pay the warrant?
 - Check the daily DAFR3581 Funds Control Report to see if the transaction is there. Transactions that could not process because of insufficient funds are listed on this report.
 - If the report is not available, check the 63 screen for the cash control fund for the transaction. (See Help Screen F33 pg 02 to determine how to compute the net cash balance.) (Cash control fund is shown on the D23 screen for the fund used on the transaction.)
- Are the PDT's (payment distribution types) consistent within a vendor? If not, the warrant will not generate until each vendor is consistent.

Sometimes, when correcting transactions in batches on the 530 screen, **data fields** from the previous transaction in the same batch **carry forward and over-write data** into the next transaction. This is not a system-related problem but a procedural problem. The problem can

ERROR CORRECTION

R*STARS: OTHE.1

02/02/05

Page 10

occur when the F10 (save) and F5 (next record) keys are hit too quickly, too many times within a batch from the 505 screen. The system needs time to complete necessary processing before paging forward to the next transaction within a batch. To ensure that a transaction does not carry forward incorrect values, the user must wait for the "**transaction successfully changed**" message before pressing F5 (next record) to page forward within the batch.

For **Document Mismatch** (EBK) errors, see SFMS Desk Manual Othe.7.

Reviewing batches on the 530 screen: The table below shows the posting status (STA), balanced indicator (BAL), edit mode (MODE), and the necessary action to clear the transactions from the 530 screen. The status defined below equal R for released, H for hold, and P for posted.

STA	BAL	MODE*	ACTION
R	Y	0, 1, 3	Released to batch cycle. No further action necessary.
H	Y	0, 1	Release to the batch cycle.
H	Y	2	Release to the batch cycle (Already posted to the financial tables).
H	N	0, 1	Balance and release to the batch cycle.
H	N	2	1. If the batch has never been through a batch cycle (Entered Count & Amount are zeros), balance and release. 2. If the batch has been through a batch cycle (Entered Count & Amount are greater than Computed Count & Amount), change the count and amount on the batch header, balance and release the batch.
H	N	3	1. Correct errors, balance, and release to the batch cycle. Payroll batch type 8 is released automatically in batch cycle and does not need to be manually released. There is a pending change request on payroll batch type 9 to do auto-release. In the meantime however, type 9 batches need to be manually released. 2. Approved transactions without errors and with a future due date will post to the tables on the night they process, even though the transaction still appears on the 530 screen.
H	Y	3	Correct errors and release to the batch cycle. Edit mode 3 batches could be a combination of errors to be corrected and other transactions listed in edit mode 4 below. If so, approved transactions without errors and with a future due date will post to the tables on the night they process, although the transaction still appears on the 530 screen.
P	N	2	Some, but not all payables have processed and generated warrants. The remaining transactions are the on 530 screen because of the following. 1. Payable transactions are waiting for future due dates to arrive 2. Fund lacks cash for payable, see DAFR3581. These batches do not need to be balanced and released again.
P	Y	2	This batch is balanced and posted and will process during the next regular batch cycle. 1. Payable transactions are waiting for future due dates to arrive. 2. Fund lacks cash for payable, see DAFR3581.
P	Y, N	4	Edit mode 4 batches originate from an edit mode of 0 or 1 (CMIA batches can also originate from edit mode 2). These batches are generally posted to the tables, but one of the following causes it to remain on 530 screen. 1. One or more of the payable transactions failed the fund control edits during the batch cycle. Determine which fund lacks sufficient cash by checking the 63 screen. Cash may be moved between funds with T-Codes 407 / 408. 2. Payable transactions are waiting for future due date to arrive. 3. Transactions are waiting for CMIA processing. These transactions include "W" batch types and transfer batches. They should post and disappear from 530 screen in next batch cycle.

* Batch Edit Modes are 0 – Data Entry Only, 1 – Master Edit Only, 2 – Edit and Post, 3 – System Assigned, Error Detected and 4 – Batch Post, Awaiting Further Processing.

Note: Edit mode 0 or 1 batches may be waiting for a future batch-header effective date to start processing.