Time Investment 8.3.5
Operations Guide

Contents

Chapter 1: Introduction

Chapter 2: Features

Chapter 3: Installation Summary

Chapter 4: Conversion

Chapter 5: Migration

Index

Introduction

The *Operations Guide* contains batch operations as well as conversion and migration information for Infopoint Time Investment.

Organization of This Guide

This guide is divided into 5 chapters, a glossary, and an index. The table below briefly describes each chapter.

Chapter	Title	Description
1	Introduction	Describes the guide.
2	Features	Describes the benefits and features of Time Investment. Lists the enhancements and modifications applicable to this product release.
3	Installation Summary	Summarizes the steps between unloading the tape and actually converting the data.
4	Conversion	Describes procedures for converting the existing application to the Infopoint format.
5	Migration	Describes procedures for upgrading to the most current release of an Infopoint application.
	Glossary	Defines financial and data processing terms applicable to Time Investment.
	Index	Provides a quick reference for locating information.

How to Use This Guide

This guide is an instructional and reference guide that should be read in the following manner.

1. Briefly browse through each chapter to obtain an overview of its contents and become familiar with the general layout.

2. Carefully read each chapter to learn specific information and its location.

3. After becoming familiar with the Time Investment product, use this guide as a standard source of instructional and reference information.

Conventions Used in This Guide

Feature	Explanation
Boldface	Identifies the actual numeric and alphanumeric values of the current field. Enter values exactly as shown.
UPPERCASE	Identifies field names (such as TIACTY-NBR), file and record names (such as TI-MRPTFIL), program names (such as TID200), and panel IDs (such as TIEPRO).
Italics	Used to emphasize or define a term or concept. Highlights field requirements.
b̶	Signifies a blank character or a blank-filled field value.
n	Signifies any numeric field value associated with a field name or card column.

Product Publications

The guides listed below comprise the documentation set for Infopoint Time Investment.

Infopoint Time Investment *Procedures Guide*

Contains daily processing procedures for Time Investment, online messages generated during processing, descriptions of the online panels (with samples), batch forms (with masters) and reports (with samples). In addition, this guide describes the MICM panels and batch forms specific to Time Investment.

Infopoint Time Investment *Reference Guide*

Contains technical information about online and batch programs within Time Investment and provides files and record layouts.

Infopoint Time Investment *Operations Guide*

Describes complete batch operations and technical procedures for Time Investment and provides conversion and migration information.

Infopoint Time Investment *Installation Guide*

Contains step-by-step instructions for installing the product.

Related Publications

The guides listed below provide additional reference material relating to Infopoint Time Investment.

Infopoint MICM *Procedures Guide*

Contains the online panels and batch forms used to maintain MICM. Procedures and reports produced by MICM are also included. A set of form masters is also provided.

Infopoint MICM *Reference Guide*

Contains MICM batch and online programs and record layouts.

Infopoint MICM *Operations Guide*

Contains conversion and migration information.

Infopoint MICM *Installation Guide*

Contains step-by-step instructions for installing the product.

Infopoint Runtime Components *Reference Guide*

Contains technical information on API and mapping features used by Infopoint systems running under the API architecture.

Infopoint Runtime Components *Installation Guide*

Contains step-by-step instructions for installing the product.

Chapter

2

Features

Time Investment is designed to satisfy the most critical needs of users by offering a true time investment. This system includes Certificates of Deposit (CD), Time Deposit Open Accounts (TDOA), Individual Retirement Accounts (IRA), and Savings accounts.

Time Investment uses Infopoint MICM (Master Information and Control Manager) to store and maintain processing parameters, institution options, customer names and addresses, and a total profile for each customer that the institution processes. Combining MICM and Time Investment, you build deposits and customer services more profitably. MICM is a functional part of Time Investment.

Input

The three types of input to Time Investment consist of maintenance transactions, monetary transactions, and control cards.

■ **Maintenance Transactions**

Maintenance transactions are entered to the system through the input/maintenance forms for existing accounts. New customer/master accounts may be added or existing accounts may be altered. All other records may be maintained, such as assignments/cautions, interest payment history, rate change history, customer payout history and customer relational records. Requests for statements, labels, and 3 x 5 cards can be made.

■ **Monetary Transactions**

The capture and balancing phase of the system captures the monetary transactions to be processed for each institution on the system. The system captures from cards, disk or tape.

■ **Control Cards**

Control cards are used for program control to select processing options. The control card formats are described in the Batch Programs chapter of the *Reference Guide 1* for each job that uses a control card.

Processing

The system includes 8 phases:

1. Institution Control Phase
2. Capture and Balancing Phase
3. Entry/Edit Phase
4. File Maintenance Phase
5. Posting Phase
6. Statement Processing Phase
7. Report Processing Phase
8. Reorganization

Time Investment uses six permanent files and several temporary files in processing Certificates of Deposit, Time Deposit Open accounts, Individual Retirement accounts and Savings accounts. The permanent files are the MICM Master File, Time Investment Institution Control File, Time Investment Master File, Time Investment Customer Control File, Time Investment Overflow File and Time Investment Total Activity File. All of these files, with the exception of the MICM Master File, are described in the Application Files chapter of *Reference Guide 2*.

Institution Control Phase

Before processing Time Investment, the Institution Control File must be updated. The updating of the processing dates is done automatically by the system when program TID020 is executed. The processing dates are calculated by using the institution holidays stored in the MICM Master File. If any change to the Institution Control File is needed, it must be made in this phase.

In conjunction with updating the Institution Control Record, Time Investment provides a method whereby institutions may be selectively processed. This is useful when processing for correspondent institutions whose work may arrive to be processed at different times during the day, and could prevent a bottleneck when the courier arrives to receive the work for the early institutions.

Capture and Balancing Phase

The capture and balancing phase of Time Investment captures the monetary transactions to be processed for each institution on the system. The system captures from cards, disk or tape. Capture input may contain a serial number, routing-transit number, an account number, the transaction code, amount, effective date and a standard description. The capture phase assigns item sequencing, which is maintained throughout the balance of the system, and lists all of the capture input. Totals are accumulated for debits and credits in each batch and are compared to a batch total to simplify the balancing procedures. Items may be deleted and added to the capture file as required. Complete capture and balancing reports are produced allowing any item to be traced easily.

Once the transactions are captured, they are sorted and a net post header is create.

Entry/Edit Phase

The entry/edit phase edits the data of every maintenance transaction and verifies that the contents are valid. The new and maintenance input edit report may list all the transactions processed through this phase, or list only those transactions that are in error. This is done according to the option selected by the user.

Any transaction failing the edit tests is rejected from further processing. The reason for rejection is shown on the report. The editing criteria may be unique for each institution and are based on data entered in MICM.

File Maintenance Phase

Batch maintenance and new accounts are processed in a separate program from the Posting program, and, therefore, may be eliminated for those institutions that do file maintenance and that enter new accounts in an online environment.

Posting Phase

The posting of monetary transactions in Time Investment is simple and straightforward. The record key for posting is the institution number and account number. The system also posts to an activity file which is used to generate report records, thus allowing recapping at five levels.

Report files to be used by the statement and report processing phases are spooled to record the activity during the day.

Statement Processing Phase

During the posting phase, each account is tested to determine the statement processing requirements during the processing run. Statement information is spooled, sorted, and printed according to processing parameters at the institution level and the account level. Statements are printed two-up in the sequence selected by the institution. Statements of similar format are printed together to aid operations and distribution.

Report Processing Phase

The report processing phase of Time Investment is controlled by each institution's processing parameters. During the posting phase, report records are spooled according to activity and as exception conditions are detected. Each institution may control the selection of reports to be produced, and the sequence in which each report is printed. Each report is produced from information contained in the report records for that report. This concept allows for the easy modification of existing reports and printing of additional reports. The system allows for reports to be produced on stock paper microfiche, or both.

Reorganization

Time Investment must be backed up each time the system is processed. Use the backup program, which copies Time Investment files to tape without altering the contents of any of the records, to backup the system. The reload program recreates the files. Program TIR020 reorganizes several files by deleting records that are older than their specified retention dates. Retention is specified on MICM Record 3500; the following records are affected.

- Account Numbers
- Assignment
- Customer Payout
- Interest History
- Rate Change
- TDOA Availability
- Transaction
- Transaction Description
- Statement Copies

This program should be run on a periodic basis.

Output

The output from Time Investment consists of the updated Master Files and the various reports that are produced by the system, on a daily, monthly, annual, or on request basis. The Time Investment files are described in the Application Files chapter of *Reference Guide 2*. The reports are described in the Reports chapter of the *Procedures Guide 2*.

Features and Options

Time Investment processing depends on the features and options selected by the user. These features and options are controlled by parameters entered in MICM. The following is a list of the features and options provided in Time Investment.

Customer Processing

- Individual customers.
- Alternate names and addresses.

Statement Processing

- Form selection at account level.
- Combined customer statement.
- Serial number sort option by account.
- No activity statement option by account.
- Ninety-nine cycled statements.
- No activity statement option by account.
- Scheduled statements.
- Snapshot statements on request.
- Copies may be sent to other customers.
- Thirty-position account type description.
- Sixty position transaction description.

Service Charge Processing

- Cycled separately from statements.
- Cycled service charges.
- Scheduled service charges.
- Affiliate service charges.
- Reporting optional by account.
- Thirty sets of parameters available and user routine interface provided.
- Retained service charges.
- Two special service charges at the account level.
- Incremental service charges.

Interest Processing

- Pay on balance or collected balance optional by account.
- Annual interest rate by account.
- Interest calculation optional by account.
- Simple interest.
- Daily compounding.
- Continuous compounding.
- Year base option by account – 360, 365, or actual day year.
- Month base option by account – 30 or actual day month.
- Pay interest or principal by check.
- Transfer interest or principal to another account.

Rate Change History Processing

- Scheduled rate changes.
- Multiple rate changes permitted.
- Effective date processing.
- Automatic re-accrual of interest.
- Rate change history printed on statement option.

Assignments and Cautions Processing

- Automatic deletion on expiration date.
- Sixty-position description available.

TDOA Availability Processing

- Deposits automatically generate availability records.
- Each deposit may accrue at a different rate.
- Transactions may be processed against a specific deposit.
- Several options for the sequence of withdrawals.

IRA/Keogh Payout Processing

- Distribution amount option.
- Distribution frequency option.
- Number of days or months between payments option.
- Equal payment option.
- Specific account for disbursing of funds.
- Several options for the sequence of withdrawals.

Renewals Processing

- Single and automatic renewal options.
- Renewal frequency option.
- Number of days or months between renewal option.
- Specific day renewal option.
- Principal disposition option.
- Ability to renew into a different type.
- Re-default type values at renewal.

Transaction Processing

- Four-digit external and internal transaction codes.
- Effective date processing with automatic adjustments to interest accruals.
- Sixty-position description available.
- Post or reject unmatched reversals option.
- Matched reversals not shown on statement.
- Block, batch, and sequence numbers carried.
- List post optional by account.

Report Processing

- Each report optional by institution.
- Report sort options by institution.
- Special forms option.
- Stand alone trial balances.
- Activity recap sort sequence option.
- Report resorting.

Passbook Accounts

- Any account designation may be identified as a passbook account.
- Special passbook reports show balanced transactions, unbalanced transactions, and discrepancies.

Online Processing

- Online editing of information.
- Immediate updating of major files.
- Security checks.
- Recovery ability.
- Field-level security.
- Multi-institution signon.

Regional Pricing

Regional pricing refers to the ability to assign different pricing structures based on the branch of domicile. Certain MICM records used by Time Investment may be defined as region specific records. Region zero is used as the default. The user is required to establish parameters for a specific region only if the processing requirements for the region are different from the default.

Up to 999 pricing regions may be established for each institution. The region numbers assigned for pricing may be different than the reporting region.

The system automatically tables parameters for a maximum of four regions. If more than four regions are used, the system automatically begins overlaying to accommodate additional regions. The system may be modified to accommodate up to 36 different regions.

For more information on regional pricing, refer to the Application Processing chapter of the *Procedures Guide 1*.

Installation Summary

The process of installing and converting to Time Investment is accomplished in two main phases. The first phase involves *downloading the product media (product tape or CD)*. For the procedure to do this, see the **Installation Guide** which contains the following information (MVS):

- Instructions for installing the Time Investment product media
- Instructions for compiling the system
- Disk space requirements
- Necessary updates to the CICS/VS tables
- JCL requirements

Once you have downloaded the product media by completing the instructions outlined in the **Installation Guide**, you are ready to begin the second phase by installing the product. The steps for compiling the system and loading all the required MICM parameters can be found in the **Installation Guide**.

Proceed to the Migration or Conversion chapters, as applicable.

Installation Processing

The following list includes the steps necessary to complete the second phase of the installation/conversion process for Infopoint Time Investment.

Step 1
Read the related documentation.

Refer to the Introduction chapter for a list of the documentation for Infopoint Time Investment, MICM, and Runtime Components.

Step 2
Convert MICM.

Refer to the Conversion chapter in the Infopoint MICM *Operations Guide* for details on this conversion.

Step 3
Install Infopoint Runtime Components.

Step 4
Catalog all source library copybooks to the source statement library.

Include those modules with 'A', 'P', 'S', or 'W' in the third position of the member name, excluding TIP700.

Step 5
Compile and catalog certain routines.

Compile the following relocatable programs and catalog the generated object code to the relocatable library.

- TIBAPI – Batch API access routine.
- TIB201 – Service charge user routine example.
- TIICKPT – I/O routine for TICKPT.
- TIICPI – I/O routine for TICAPT.
- TIICPL – Load I/O routine for TICAPT.
- TIIRPTO – I/O routine for TIRPTO.
- TIITEMP – I/O routine for TITEMP.
- All called report programs (modules with a 'G in the third position of the name).

Step 6
Compile the online modules (all 'L' programs).

Compile these programs to the Core Image Library. The 'L' is in the third position of the name. Use 'NOOPT' in the CBL card.

Step 7
Delete Time Investment entries from the MICM Table File.

If you are migrating from a previous release of Time Investment (8.1 or less), use member MITTID as input for MICM forms specific to Time Investment. MICM program MIR061 is used to delete the old versions of MICM records 3500, 3501, 3502, 3503, 3504, 3505, 3507, and 3508.

Step 8   **Delete MICM records**.

If you are migrating from a previous release of Time Investment (8.1 or less), run MICM jobs MID090, MID100, and MID200 in sequence using the following members as input:

- TIDELABO (Deletes MICM Record 0404)
- TIDELERR (Deletes MICM Record 0006)
- TIDELOPR (Deletes MICM Record 0405)
- TIDELPOT (Deletes MICM Record 0407)

If you are migrating from release 8.2 or higher, run MICM jobs MID090, MID100, and MIDR00 in sequence, using the following members as input:

- TITRND (deletes MICM records 4002 and 4004)
- TIMSGD (deletes MICM Record 0006)

Be sure to close the MIMAST File.

Step 9   **Run MICM jobs MID090, MID100, and MID200 sequentially**.

Use members TIMSG and TITRN as input. TIMSG contains:

- MICM Form 0006 – Error Message Information
- MICM Form 0404 – Online Abort Messages
- MICM Form 2011 – Online Messages

TITRN contains:

- MICM Form 4000 – Work Unit Description
- MICM Form 4002 – Transaction Description
- MICM Form 4004 – Menu Dialogue

Note: If you will be using the sample Time Investment files delivered on the distribution tape, you must include member TIMICM. This member contains the card input for the MICM records necessary to process the sample Time Investment files.

Be sure to close the MIMAST File.

Step 10   **Establish Operator records**.

Use either the MICM online transaction MIOPER (Operator Record) or the batch program MIR410 (Operator Record Update). Member TIOPER can be used as a sample of what is required for batch.

Step 11   **Establish Operator Dialogue records**.

Use either the MICM online transaction MIDIALOG (Operator Dialogue) or the batch program MIR420 (Operator Dialogue Record Update). Member TIDIAL can be used as a sample of what is required for batch.

Step 12 **Compile the remaining programs**.

Compile the programs that contain a 'B', 'C', 'D', 'M', 'R', or 'Y' in the third position of their names and catalog the generated object code to the Core Image Library.

Step 13 **Run MIR700 using the members TIAMTC and MIATI as input**.

Be sure to include all other input to the Application Management Table (e.g., MIAMTC) because this program adds Time Investment AMT entries to the table. Be sure to close the MIAMTT File.

Step 14 **Determine volumes for the various files and establish JCL for each program**.

Information on files for each program is found in *Reference Guide 2*.

Step 15 **Establish the common MICM forms required to convert to Time Investment**.

See the Common MICM Forms section in this chapter to identify the MICM forms needed. MICM Record 0006 (Error Message Information) and MICM Record 4002 (Transaction Description) can be omitted from this step since they were created in Step 10.

Note: If you currently have Infopoint Time Investment, you have already established the necessary MICM forms and can omit this entire step.

Step 16 **Establish the Time Investment-specific MICM forms required to convert to Time Investment**.

Note: If you currently have Infopoint Time Investment, you have already established the necessary Time Investment forms and can omit this step.

See the MICM Forms Specific to Time Investment section in this chapter to identify the Time Investment forms needed.

Step 17 **Proceed to the Conversion or Migration chapter**.

For new users of Time Investment, see the Conversion chapter in this guide for converting your data to Infopoint Time Investment.

For current users of Infopoint Time Investment, see the Migration chapter in this guide for migrating your existing Infopoint Time Investment data to a more recent release.

Processing Parameters

The section provides an overview of Master Information and Control Manager (MICM) and Time Investment parameters that must be set up *prior* to the conversion and daily operation of Time Investment.

Common MICM Forms

A facet of conversion is to establish or define parameters and options in Time Investment. To accomplish this, certain MICM forms must be completed. This section lists those forms and provides brief narratives.

Detailed field descriptions and parameters along with the actual forms are found in two sources of documentation:

- MICM *Procedures Guide* (Batch Forms chapter). This chapter contains common MICM forms used by more than one application.

- Time Investment *Procedures Guide 2* (MICM Batch Forms chapter). This chapter contains MICM forms specific to Time Investment.

The following forms are found in the Batch Forms chapter of the MICM *Procedures Guide*:

Form 0000	Form 0021	Form 0301	Form 2000	Form 2013
Form 0002	Form 0211	Form 0307	Form 2001	Form 2015
Form 0003	Form 0231	Form 0316	Form 2005	Form 4000
Form 0006	Form 0234	Form 0323	Form 2010	Form 4002
Form 0020	Form 0245	Form 0404	Form 2011	Form 4004

Form 0000

Institution Information

Institution information must be entered for the System Institution (Institution 000) and each actual institution to be processed.

Note: If you have already established this form for another Infopoint product, you do not need to create it again.

This record contains the name, address, and holidays for each institution to be processed. Put the holidays common to all institutions in the system record (Institution 000). The holding company number must be established here, if appropriate. The name of the holding company is established on the holding company information Form 0020.

Form 0002

Type Information

There must be one form for each type product within an institution.

Form 0003   **Code Description**

This form is for code identification and its description. It is a multi-purpose form whose key and key descriptions may vary. This form is used to input messages for the pre-renewal and renewal notices.

Form 0006   **Error Message Information**

This form creates the error messages used by most TriSyn Group system applications. The member TIMSG contains the error messages for Time Investment in batch input format.

Form 0020   **Holding Company Information**

This form establishes the name and address of a holding company. The institutions related to this holding company are assigned on the institution information form.

Form 0021   **Region Information**

This form establishes the name and address of an institution's regions. The branches related to this region are assigned on the branch information form.

Form 0211   **Application Information**

This form establishes the application parameters necessary for Time Investment processing. The internal application must be '08' for Time Investment. One form must be set up for each institution being processed.

Form 0231   **Application Edit Table**

If completed, this table is used to edit codes such as officer and class.

Form 0234   **Federal Withholding Information**

This form establishes the parameters necessary for federal withholding processing. One should be set up for each institution being processed.

Form 0245   **General Ledger Interface**

This form defines the General Ledger accounts to which totals from Time Investment are processed. Refer to *Procedures Guide 1* for additional information.

Form 0301   **Application System Option Flags**

Refer to *Procedures Guide 1* for an explanation of the system options. The application number for Time Investment is '08'.

Form 0307   **Application System Report Flags**

Refer to *Procedures Guide 1* for an explanation of the system report flags and a list of daily accounting reports and their report numbers. The statements (reports) are also set up on this form. Monthly reports also should be selected at this time. All report records should be set up.

Form 0316   **Source Code Description**

This form defines descriptions that appear on statements. A monetary transaction entered with a source code causes the appropriate description to appear on the statement.

Form 0323   **Deposits Fund Sweeping Institution Information**

This form identifies the originating institutions information used to create the ACH Batch Header, and Batch Control records, as well as the trace number in the Entry Detail record. One form per institution.

Note: This form is also used by Deposits.

Form 0404   **Online Abort Messages**

This form contains the abort messages to be displayed when an error occurs that prevents further processing of an online transaction. The member TIMSG contains the online abort messages.

Form 2000   **Advertising Messages**

This form may be used if you would like an advertising message to appear on the statements.

Form 2001   **Branch Information**

Branch information must be input for each branch within the organization to establish the branch number and name and address. This form also establishes the pricing and reporting region number, if appropriate. The name of the reporting region is established on the region information Form 0021. If you do not have branches, set up Branch 0001 and specify it for each account.

Form 2010   **Record Security**

Record security parameters allow fields to be defined as unprotected, dark protected, inquiry only, or updated. This form is not required.

Form 2005   **Cycles Information**

This form defines both the statement cycles and the service charge cycles. This is used when the Statement Frequency Code is 'C' or the Service Charge Frequency Code is 'C' for cycle. If you are not using cycle processing, this record still must be filled out with blanks.

Form 2011   **Online Messages**

This form contains online messages to be displayed when errors or special situations occur. The member TIMSG contains the online messages.

Form 2013   **Transaction Code Parameters**

This form should be filled out for each external transaction code you have. To do this, enter application '08' and the transaction code you wish to describe. It should also be filled out for the system-generated transaction codes. To do this, enter application '98' and the internally generated transaction code. Refer to Transaction Code Processing in *Procedures Guide 1* for a list of the transaction codes within Time Investment.

Form 2015   **Index Rate Record**

Index rates for the institution may be defined on this form. Accounts with an interest plan value of 'P' may be tied to this form in order to assign a rate to the account.

Form 4000   **Work Unit Description**

This form is used to define a work unit, which is a series of panels logically grouped together as an individual online transaction. The member TITRN contains the MICM 4000 Records.

Form 4002   **Transaction Description**

This form defines each panel, work unit, and menu available online. It also contains the entry used to build the menu. The member TITRN contains the MICM 4002 Records.

Form 4004   **Menu Dialogue**

This form is used to create personalized menus and submenus. The member TITRN contains the MICM 4004 Record that creates the submenu TIME for all of the Time Investment transactions.

MICM Forms Specific to Time Investment

The following MICM forms are specific to Time Investment. They can be found in the MICM Batch Forms chapter of *Procedures Guide 2*.

Form 3500	Form 3503	Form 3506
Form 3501	Form 3504	Form 3507
Form 3502	Form 3505	Form 3508

Form 3500

Time Investment Institution Parameters

This form establishes the set of parameters needed to control the processing of Time Investment for each institution.

Form 3501

Time Investment Type Defaults

This form defines the default values used in Time Investment for each account type designated by the user for Certificates of Deposit, Savings Accounts, and Time Deposit Open Accounts.

Form 3502

Time Investment Type Processing Parameters

This form establishes a set of parameters for each product type that determines minimum balances to accrue and pay interest with. Also included are other miscellaneous system options for ease of processing.

Form 3503

Time Investment Penalty Routines

This form establishes a set of penalty routine parameters used by Time Investment. Up to 30 parameters may be established for each institution.

Form 3504

Time Investment Interest Rate Tables

Various rate tables may be defined on this form. The account's Interest Plan determines how the rate is assigned.

Form 3505

Time Investment Renewal Defaults

This form indicates the type to which a renewing account renews. It also defines the fields from Form 3501 to which the account defaults.

Form 3506

Time Investment Title

This form contains the different report heading titles selected by the user for the applications contained within Time Investment.

Form 3507

Time Investment Service Charge Parameters

This form establishes a set of service charge parameters used by Time Investment. A maximum of 30 parameters may be established for each institution.

Form 3508   **Time Investment Monthly Report Parameters**

This form establishes a set of parameters used for creating summary control breaks for monthly statistical reporting purposes by specifying various amount ranges or time period ranges.

Time Investment Forms

Once you have established certain MICM parameters, you are required to set up specific Time Investment forms. This section lists those forms and provides brief narratives.

Detailed field descriptions and parameters and the actual forms are found in two sources of documentation:

■ The Application Forms chapter of *Procedures Guide 1*. This chapter contains Time Investment forms used in daily processing but also used in conversion.

■ The Conversion chapter of this guide. This chapter contains Time Investment forms used only for conversion. *The forms shown below with an asterisk (*) are used solely for conversion.*

Form 15 *	Form 20 *	Form 31
Form 16	Form 25	Form 32
Form 17	Form 30	Form 33

Form 15

Customer Control Input

This form establishes information that controls the processing of Time Investment customers. A customer record is required by the system for each customer that has Time Investment instruments with the institution.

Form 15 *

Customer Control Conversion

This form is used for conversion of the customer control information. This includes the previous years history for IRAs and Keoghs including contributions and distributions.

Form 16

Customer Payout History

This form may be used if you have customer distribution payout history that could be converted for history consideration.

Form 17

Employer Record New or Maintenance

This form establishes information to create a Time Investment Employer File. The Employer File is not required by the system, but is an option that allows you to tie several accounts together under the same Keogh or SEP plan.

Form 20

Master Record New or Maintenance

This form establishes information that controls the processing of the Time Investment instruments, Certificates of Deposit, Savings Accounts, and Time Deposit Open Accounts. This form contains all of the processing options for these account designations.

Form 20 * **Master Conversion Input**

This form is used for conversion of the master accounts to Time Investment. This includes the monetary balances, processing information, and history of float, interest, average balances, service charges, and statements.

Form 20 * **Transaction Conversion**

This form may be used if you have transaction history on the master accounts that you would like to convert.   This is information from your old accumulated transaction file for your Time Investment instruments. You need to consider the implications of converting the accumulated transactions from the old system.

Form 25 **Assignment**

This form may be used if you have assignments/cautions on the system that you are converting from and want to transfer them over to Time Investment.

Form 30 **Statement Copies**

This form may be used if you want to establish a statement relationship among accounts. It allows you to send a copy of a statement to a maximum of 16 addresses.

Form 31 **Interest Payment History**

This form may be used if you have interest payment history information on the system that you are converting from and want to transfer it over to Time Investment.

Form 32 **Rate Change History**

This form may be used if you have rate change history on the system you are converting and want to transfer it over to Time Investment.

Form 35 **TDOA Availability**

This form may be used if you have TDOA Availability information on the system that you are converting from and want to transfer it over to Time Investment.

Reporting Requirements

Review the sample reports and determine which reports to print and the sort sequences for these reports. These options are established through parameters on MICM Record 0307 (Application System Report Flags). You can turn off any reports you do not need.

The Reports chapter of *Procedures Guide 2* gives you a detailed explanation of each report produced by Time Investment.

Preparation for the output of reports involves an analysis of your institution's need for each available report. You must also decide the specific details of actual report printing.

All reports provided by the system should be reviewed to decide:

■   Who should review daily activity?
■   How often should request reports be generated?
■   Which reports are not necessary for your operation?

Make decisions jointly with all parties involved. Be sure your decisions meet all setup/conversion, daily operation, and management needs.

Other decisions you need to make are:

■   Will the report be printed, or will it be put out to microfiche?
■   If the report is printed, what form will be used?

You may need to design and order the forms for printing statements and envelopes for the statements.

MICM Security

Maintaining institution parameters and designating the appropriate user security is critical to the ongoing operation of the system. Carefully consider who is responsible for these issues and to what extent that person distributes the various levels of security.

When you process this system online, decide who has access and what functions they are allowed to perform. This information is entered on:

- Operator Record (MIOPER)
- Operator Dialog (MIDIALOG)
- Transaction Descriptions Record 4002

These records control system-wide security, not just individual institutions. These security control records allow operators to perform only those functions that have been established for them.

Additionally, MICM Record 2010 (Record Security) can be established to provide field-level security. Unique attributes can be set for dormant, escheat, employee, and regular accounts. This security feature is also available at the field level. Field-level security is completely optional.

Ready for Conversion Processing

At this point, all MICM and Time Investment conversion forms are set up. After supplying this conversion information to the data center, you need to coordinate the conversion job steps with the data center and review all output from these job steps. (The steps for conversion processing are described in the Conversion chapter.) This ensures that all accounts have been converted correctly and that the system is in balance with the system from which you are converting. After a determination is made that a clean and balanced conversion has occurred, you may begin daily processing with the Time Investment daily job stream. See the Batch Programs chapter of *Reference Guide 1* for daily program information.

Chapter

4

Conversion

This chapter describes the steps in preparing for conversion and actually converting from your existing application to Infopoint Time Investment. It also lists forms, programs, reports, and files specific to the conversion process.

Note: If you are currently using Infopoint Time Investment and are upgrading to a more recent release, skip this chapter and proceed directly to the Migration chapter.

Preparation

The success of the conversion process depends on your organizational techniques and understanding of the system. This section discusses key issues in preparing for the conversion such as deciding the conversion team and creating a written conversion plan. This preparation allows you to keep on track with the requirements of a conversion and helps you to efficiently and quickly transfer or convert your data.

Assemble the Conversion Team

From the information supplied in this section, you should be able to select the best team members. The illustration below illustrates the expertise needed to perform a successful conversion.

TriSyn Group Support

The Account Manager assigned to your installation is an important member of your conversion team. Use your account manager as a resource throughout the conversion for advice about your conversion plan.

Select one or two team members to report any problems that they encounter to Technical Support.

Financial Product Expertise

Your team should have some financial expertise and know the products the institution offers and the departmental procedures for supporting these products. These members must possess a basic knowledge of the products such as rates and terms, and also realize how the products interface with each other.

For example, certain checking accounts can qualify for a line of credit when there are insufficient funds. Knowledge of the dependency or relationship between the checking account and the line-of-credit account (and the departmental procedures regarding the relationship) is important information in the conversion effort.

Some products rely on the information provided by other products. For example, a line-of-credit requires balance information from a checking account. When converting a product such as this, you must know how the calculations were made that determine when the credit is extended to the customer's account.

Financial product team members also provide valuable knowledge of the auditing requirements that must be addressed during the conversion. This information is important because an audit trail must be maintained as data is moved from the old system to Time Investment 8.3.

In addition, members who have financial product expertise also advise the team on policy matters such as when the customers and accounts will be converted and how the converted data will be tested.

Data Center Expertise

Data center personnel can analyze the current data and then compare it to the record elements in the database, especially when converting account histories. Because there is a large amount of data, thorough analysis must be completed before programming begins.

After the analysis is complete, the data center team members must write the code that will transform the current data into a format that is usable by Time Investment 8.3. Depending on the amount and type of data that is loaded, this effort could be extensive. Therefore, your conversion team must know how the programs function and the current product specifications.

For Time Investment, the programmer should know COBOL because the conversion programs are written in this language.

Branch Office Expertise	If financial transactions are posted online in the branch offices before they are recorded in the main office, include branch office expertise on your team. Your team will need branch expertise when establishing the institution structure.
End User Expertise	Clerical workers who maintain the institution's data can assist in product design and influence what data is converted to Time Investment.
Operations Expertise	Operations personnel can advise you concerning proof-of-deposit operations. These team members can assess the impact of the conversion in relation to your institution's method of verifying deposits.
Controls Expertise	Include controls personnel on your team since they can provide important processing knowledge.
Marketing Expertise	Marketing provides vital market information that must be considered when products are designed. In addition, they advise the team about the marketing impact of the conversion.

Formulate the Conversion Plan

Every conversion plan contains certain components. This section describes the areas to include and explains some strategies to consider as you formulate your conversion plan.

Research

A usable plan is the result of thorough research. Become familiar with the current data elements maintained in the applications that the team is converting. This means the team must:

1. Determine the location of the data and assess the problems of gathering it in one place.

   Decentralized data presents different problems than centralized data. For example, the decentralized data might contain duplicate information about customers and accounts. The data might also be in different formats and require standardization. Usually, the team needs to gather data from different media such as hard-copy files, diskettes, and mainframe files.

2. Identify how the data was obtained.

   For example, the information maintained on a customer could have been gathered from various sources and then edited. The method used to gather the information is an important part of the plan.

3. Determine if the data is complete and accurate.

   Obviously, your data must be examined for accuracy before you prepare it for the conversion dialogs and programs.

4. Verify the data definitions and the institutions use of particular data elements.

Identify Goals	Identify the goals of the conversion team and the tasks associated with achieving each goal. The team that develops a plan should adopt a global view that addresses the general questions raised by a conversion. The answers to any general questions, in turn, help identify the tasks of the conversion. The following are some of the questions that the conversion team should initially address:

- Which of the present applications are you converting to Time Investment 8.3?

- What new information do you want to load (i.e., information not previously available)?

- What information must you define in Time Investment 8.3 before any data is loaded?

- Are you converting current applications at the same time or in stages?

- How are you preparing the current data for loading?

- Are all of the applications being loaded in single or multiple loads?

- Does scrubbing occur before or after the data is converted?

The data center needs to confirm the information available from your current processing system before conversion.

Other possible goals in preparing for conversion are:

- Make a list of all the transactions and transaction codes for each transaction processed in Time Investment 8.3.

- List all possible requirements and options that Time Investment 8.3 offers. Adapt these requirements or options to the converting institution environment, including both the MICM Master File parameters and Time Investment parameters.

- Establish dates and periodically distribute status reports to ensure that all tasks are on target.

Typical Plan	Some common tasks associated with all conversion plans are:

Start Dates	When each task begins.
Target Dates	When the task is scheduled for completion.
Critical Dates	Dates when the critical tasks must be completed. If the dates are not met, then the calendar for the project changes.
Actual Dates	Dates when the tasks are actually completed.
Related Tasks and Activities	A detailed explanation of all of the tasks and activities. This includes an explanation of the tasks that are to be completed by the conversion team.
Individuals Responsible	Identify the persons who are responsible for each task.

| Training Needed | Specify the education courses necessary to implement the plan. This is critical to the success of the project. (Your Account Manager can help you select the classes.) |

Create a Planning Document

Since a conversion plan contains many tasks and requires a number of different contributors, you should include all of the tasks of the conversion in a document that you then distribute to your conversion team.

The planning document serves as a central repository for information about the goals, tasks, scheduling, and progress of the project and can be used to communicate information to users about the impending conversion to Time Investment 8.3. A well-documented plan not only benefits the team but all personnel affected by the conversion.

Because each conversion team is unique, the method of documenting the team's conversion efforts is unique. The best format depends on the personnel you have assembled to perform the conversion. Although each project plan is unique, there are some common elements to all plans.

| Installation Instructions | Installation instructions are included with the tape/CD shipment. The install utility program requires approximately two days to run. Refer to the *Installation Guide* provided on the Documentation CD for detailed information about installations. A TriSyn Group representative is always onsite for a first install. |

| Institution Structure | Include your institution structure in the plan before you convert any data. As previously stated, Time Investment gives you the flexibility to identify any entity within your organization as an institution. For example, you could identify a branch office or a department within the office as institutions. You can set up your institutions so that your reports yield information about select products or about profit centers. |

| Data to Convert | Record the location of the data that you intend to convert. This is particularly important for the programmers because they will be able to find the data quickly. |

Include in this section the methods used to prepare the data. This includes the location of the JCL used for preparing the data for the conversion dialogs and programs.

| Conversion Team Goals | Present the overall aims of the project in a concise manner. For example, a goal could be to convert and test all loan products before year-end processing. |

Team Members

Specify the name of team members and their role in the project. For example:

Team Member	Title	Conversion Role
Linda Jones	Project Leader	Coordinate the execution of conversion programs
Arthur Mack	Systems Analyst	Prepare current data
Sarah Getty	System Programmer	Monitor testing
Lee Smith	Marketing Manager	Advise the team about market needs

Task Information

Include information about the tasks assigned to each team member:

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              CONVERSION ACTIVITIES               PAGE 1


ID  STATUS    NAME            START    END      STAFF     DAYS

A1  Current   Identify Stop Cntl  1/1/92   1/31/92  Johnson   2

B1  Current   Identify Hold Cntl  1/1/92   1/31/92  Miller    2

C1  Current   Identify Stop Pro   2/1/92   2/28/92  Katz      1

D1  Current   Identify Hold Pro   2/1/92   2/28/92  Fulton    1

E1  Current   Identify Hold Tra   3/1/92   3/31/92  Rensky    3

F1  Current   Identify Stop Tra   3/1/92   3/31/92  Stephens  3

G1  Current   Identify Inst Info  3/1/92   3/31/92  Friedman  2

H1  Current   Identify Inst Pro   4/1/92   4/30/92  Smith     2

I1  Current   Identify Inst Tra   4/1/92   4/30/92  Burr      31

J1  Current   Identify Inst Test  4/1/92   4/30/92  Schultz   30
```

Meeting Schedule

Show the team meeting schedule. For example:

- The conversion team will meet every Friday at 9:00 A.M. in the main conference room.

- The team will discuss the status of the project and plans for the following week.

- An updated conversion plan will be distributed every Monday morning to the conversion team.

Listing of Terms

List all unique terms and definitions used in the document. For example:

Conversion Movement of current data to Time Investment 8.3.

Load Program COBOL program supplied by Computer Associates that converts input files containing current system data to records for Time Investment 8.3.

Hardware Requirements Specify the hardware that the conversion team needs, with the following possible headings.

Hardware	Dates Needed	Reason for Need
Mainframe	4/15 to 4/17	Load customers
High-speed printer	4/15 to 5/1	Print conversion reports

Location of Data List the location of all data to be input or converted to Time Investment 8.3. Since the data can be found in several places, it is very important to note the locations. For example:

Type of Data	Location
Savings account histories	Customer service department file #1
Checking account histories	Customer service department file #2
Mortgage records	Mortgage department personal computer #4

System Definition Before converting any data, you must identify institutions and products on Time Investment 8.3. Include an institution structure in this section. The illustration conveys to all team members the manner in which the organization has been redesigned for the new release.

Include in the system definition section the names of the products defined on the system. If you are renaming your products, be sure to list the old names of the products. For example:

Old Product Name	New Product Name
Savings Account	Customer Savings Plan #1
Line of Credit	Preferred Customer Credit

Conversion Program Information Before you run the conversion programs, your data must be prepared in the input record format. The input record formats should be printed so the programmers know how to code the programs that prepare your data for conversion.

As with any conversion plan, your document should contain certain information about the conversion process:

- Flow chart or data-flow diagram
- List of the products to convert
- Sequence of the products conversion
- All conventions that are used in the data preparation programs
- Sample job streams
- Reports and notices that should be printed
- Testing that should be done to the programs

Note: The following sections in this chapter discuss the actual conversion process.

Testing and Acceptance

The accuracy of the data must be verified. If the data has been loaded incorrectly, establish procedures for correcting data exceptions and reloading the data.

Develop acceptance criteria. Specify when and how the converted data should be tested.

Switching to the New System

You must decide how long Time Investment 8.3 will run in test mode and in what manner transactions (under the old system) will be converted to Time Investment 8.3. In addition, list the criteria for comparing the systems to check the accuracy of the converted data.

Revising the Plan

Keep the plan up-to-date. Many individuals will be relying on the plan for current information, so you must update the plan regularly.

Conversion Processing

This section lists the processing steps for converting from your existing application to Infopoint Time Investment. It is assumed that basic installation requirements have been met and MICM and Time Investment parameters are already in place. (See the Installation Processing chapter.)

Process the following programs and information in the order listed.

Step 1 **Write Time Investment conversion programs**.

Build a Card Image File for conversion input. Use the following Time Investment forms.

Form 0015	Form 0020	Form 0031
Form 0016	Form 0025	Form 0032
Form 0017	Form 0030	Form 0035

Detailed field descriptions can be found in the Forms section of this chapter and the Application Forms chapter of *Procedures Guide 1*.

Once the card image Conversion Input File program is written and compiled, you are ready to proceed with running the Time Investment conversion job stream (shown in the following steps).

Step 2 **Establish API Files (VSAM environment only)**

Run TIVSMDEF to define and initialize the Time Investment VSAM API files *or* run TIVSMLD to define and initialize the Time Investment VSAM API files to allow for load processing. If this JCL is used to define the Time Investment files, you must specify VSAM access method (value 'V') on the control card for programs TIC100, TIC110, and TIC140.

Step 3 **Run TIC020 (Institution Control File Conversion)**.

The card input required is described in the Programs section of this chapter. TIC020 should be run with the current processing date being the day before the conversion.

Step 4 **Run TID020 (Institution Control File Update)**.

The current date after running this program must be the accrue-thru date for the interest accrual. The capture format code equals '0' (delete and define the TICAPT File).

Step 5 **Run the program containing the Card Image Conversion Input File created in Step 1**.

This program should contain all information extracted from the old system.

Step 6   **Run TIC040 (Transaction Conversion Edit and Sort)**.

This program sorts and edits the converted transaction history. (See Form 20, Cards 75, 76, and 77 in the Forms section of this chapter.)

Step 7   **Run TIC060 (Conversion Sort)**.

This program sorts the converted non-monetary input (all other forms).

Step 8   **Run TIC080 (Customer Conversion Input Edit)**.

This program edits the customer control and the customer payout history (Forms 15 and 16).

Step 9   **Run TIC100 (Customer Conversion)**.

This program creates the Customer Records (CST), the Payout History Records (PAY), and the IRA/Keogh Records (IRA).

Step 10   **Run TIC105 (Employer Conversion Input Edit)**.

This program edits the employer input. (See Form 17 in the Application Forms chapter of *Procedures Guide 1*.)

Step 11   **Run TIC110 (Employer Records (EMP))**.

This program creates the Employer Conversion File.

Step 12   **Run TIC120 (Master Conversion Input Edit)**.

This program edits all forms that were input, except Forms 15 and 16, which were edited in TIC080).

Step 13   **Run TIC140 (Master Conversion)**.

This program creates the Master Records (MST), the Transaction Records (TRN, TRD), and the Availability Records (AVL).

Step 14   **Run TIC160 (Miscellaneous Conversion)**.

This program creates the Statement Copies Records (XRL), the Interest Payment History Records (INT), and the Rate Change History Records (RAT).

Step 15   **Run TIC170 (Rate Aggregates)**.

This program calculates rate aggregate fields on the Account Masters.

Step 16   **Run TIC190 (TDOA Deposit Verification)**.

This program verifies balances on Time Deposit Open Accounts.

Step 17   **Run TIC200 (Total File Conversion)**.

This program reads and sorts the Account Masters to create the Total Activity records (TA1 and TA2).

Step 18

If you are merging a new institution with existing institutions, use the JCL (TIC220L) provided.

This JCL is required to execute program BIS867B (Infopoint Runtime Merge Utility). BIS867B reloads a backup of the existing Time Investment records and a backup of the newly converted Time Investment records. This process creates the merged tables.

Note: In order to properly execute BIS867B, the files *must* be previously backed up with BIS860B.

Forms

See the Application Forms chapter of *Procedures Guide 1* for forms used in the daily processing of Time Investment. Use the following forms for *conversion processing only*.

Form 15 – Customer Control Conversion

Purpose

This form, in conjunction with cards 00 – 04 on Form 15 (Customer Control Input), is used for conversion of the customer control information. This includes the customer control number, contribution and distribution information, payout and service charge dates, and date of death information.

You can enter a maximum of four cards each for cards 10, 11, 12, and 13, depending on the number of years you are converting.

Note: The documentation for references to Card 09 can be found in the Application Forms chapter of *Procedures Guide 1*.

Cards 10, 11, and 12 are for IRAs only.

Cards Required

None

Header Portion of Each Card

1 – 2

System Number. Valid entry is **08**.
Numeric, 2 positions, required.

3 – 5

Institution Number. Valid entries are **001 – 999**.
Numeric, 3 positions, required.

6 – 15

Control Number. Used for IRA or Keogh customers being converted to the system. Leading blanks are permitted.
Numeric, 10 positions, required.

16 – 21

Not used.

22 – 23

Form Number. Valid entry is **15**.
Numeric, 2 positions, required.

24 – 25

Card Number. Valid entries are **10 – 14**.
Numeric, 2 positions, required.

Card 10

26	Year Contribution. Year for this information. Valid entries are: **1** Current year. **2** Previous year 1. **3** Previous year 2. **4** Previous year 3 or total of all years prior to year 2. *Numeric, 1 position, optional*. Reference: Card 09, field 030, 031, 032, and 033.
27 – 35	Maximum Contribution Amount. *Numeric, 9 positions, optional*. Default: $2000.00 Reference: Card 09, field 030.
36 – 44	Rollover Amount. Total rollover contribution amount. *Numeric, 9 positions, optional*. Reference: Card 09, field 031.
45 – 50	Rollover Date. Date of last rollover contribution. Format is MMDDYY. *Numeric, 6 positions, optional*. Reference: Card 09, field 031.
51 – 59	Regular Amount. Total regular contribution amount. *Numeric, 9 positions, optional*. Reference: Card 09, field 032.
60 – 65	Regular Date. Date of last regular contribution. Format is MMDDYY. If this date is not available, the conversion date may be used. *Numeric, 6 positions, optional*. Reference: Card 09, field 032.
66 – 74	Employer Amount. Total employer contribution amount. *Numeric, 9 positions, optional*. Reference: Card 09, field 033.
75 – 80	Employer Date. Date of last employer contribution. Format is MMDDYY. *Numeric, 6 positions, optional*. Reference: Card 09, field 033.

Card 11

26	Year Contribution. Year for this information. Valid entries are: **1** Current year. **2** Previous year 1. **3** Previous year 2. **4** Previous year 3 or total of all years prior to year 2. *Numeric, 1 position, optional*. Reference: Card 09, fields 034, 035, 046, 055, and 063.

27 – 35	Insurance Amount. Total insurance contribution amount. *Numeric, 9 positions, optional.* Reference: Card 09, field 034.

36 – 41	Insurance Date. Date of last insurance contribution. Format is MMDDYY. *Numeric, 6 positions, optional.* Reference: Card 09, field 034.

42	Over Contribution Flag. Valid entries are:
	  ƀ Not over contributed.
	  X Over contributed.
	Alphanumeric, 1 position, optional.
	Reference: Card 09, field 035.

43 – 49	Contributions After Year End. Total contributions made after year end. *Numeric, 7 positions, optional.* Reference: Card 09, field 046.

50 – 58	Transfer Amount. Total contributions transferred in from another financial institution. *Numeric, 9 positions, optional.* Reference: Card 09, field 055.

59 – 64	Transfer Date. Date of the last transfer of funds from another financial institution. Format is MMDDYY. *Numeric, 6 positions, optional.* Reference: Card 09, field 055.

65 – 75	Beginning Balance January 1. Total IRA balance for this customer as of January 1 of the current year. *Numeric, 11 positions, optional.* Reference: Card 09, field 063.

76 – 80	Not used.

Card 12

26	Year Contribution. Year for this information. Valid entries are:
	  1 Current year.
	  2 Previous year 1.
	  3 Previous year 2.
	  4 Previous year 3 or total of all years prior to year 2.
	Numeric, 1 position, optional.
	Reference: Card 09, fields 039, 056, 057, and 058.

27 – 35	Non-deductible Amount. Total non-deductible contribution amount. *Numeric, 9 positions, optional.* Reference: Card 09, field 056.

36 – 41	Non-deductible Date. Date of the last non-deductible contribution. Format is MMDDYY. *Numeric, 6 positions, optional.* Reference: Card 09, field 056.
42 – 50	Capital Gain Amount. Total capital gain amount. *Numeric, 9 positions, optional.* Reference: Card 09, field 057.
51 – 56	Capital Gain Date. Date of the last capital gain entry. Format is MMDDYY. *Numeric, 6 positions, optional.* Reference: Card 09, field 057.
57 – 65	Capital Loss Amount. Total capital loss amount. *Numeric, 9 positions, optional.* Reference: Card 09, field 058.
66 – 71	Capital Loss Date. Date of the last capital loss entry. Format is MMDDYY. *Numeric, 6 positions, optional.* Reference: Card 09, field 058.
72 – 77	Date of Last Withdrawal. Format is MMDDYY. *Numeric, 6 positions, optional.* Reference: Card 09, field 039.
78 – 80	Not used.

Card 13

26	Year Withdrawals. Year for this information. Valid entries are: **1**　Current year. **2**　Previous year 1. **3**　Previous year 2. **4**　Previous year 3 or total of all years prior to year 2. *Numeric, 1 position, optional.* Reference: Card 09, field 036.
27 – 35	Distributions Amount. Total regular distribution amount. *Numeric, 9 positions, optional.* Reference: Card 09, field 036.
36 – 44	Rollover Amount. Total rollover distribution amount. *Numeric, 9 positions, optional.* Reference: Card 09, field 037.
45 – 53	Non-deductible Amount. Total non-deductible withdrawal amount. *Numeric, 9 positions, optional.* Reference: Card 09, field 060.

54 – 62	Excess Withdrawals Amount. Total amount of excess withdrawals made after year end. *Numeric, 9 positions, optional.* Reference: Card 09, field 038.
63 – 71	Disbursement Withholding Amount. Total disbursement tax withheld. *Numeric, 9 positions, optional.*
72 – 80	Transfer Amount. Total amount of funds transferred to another financial institution. *Numeric, 9 positions, optional.* Reference: Card 09, field 059.

Card 14

26 – 31	Last Service Charge Date. Format is MMDDYY. *Numeric, 6 positions, optional.* Reference: Card 09, field 050.
32 – 37	Last Payment Date. Format is MMDDYY. *Numeric, 6 positions, optional.* Reference: Card 09, field 025.
38 – 43	Last Maintenance Date. Format is MMDDYY. *Numeric, 6 positions, optional.* Reference: Card 09, field 028.
44 – 49	Last Activity Date. Format is MMDDYY. *Numeric, 6 positions, optional.* Reference: Card 09, field 027.
50 – 57	Date of Death. Format is MMDDYYYY. *Numeric, 8 positions, optional.* Reference: Card 09, field 026.
58	Date of Death Flag. Valid entries are: ƀ Not deceased. **X** Deceased. *Alphanumeric, 1 position, optional.* Reference: Card 09, field 026.
59 – 67	Minimum Payout Last Year. Minimum distribution amount for last year. Valid entries are **0000000.00 – 9999999.99**. *Numeric, 9 positions, optional.* Reference: Card 09, field 065.

68 – 76   Minimum Payout This Year. Minimum distribution amount for this year. Based on Update Payout Amount, this amount is used to determine a new Payout Amount based on the Payout Frequency/Term. Valid entries are **0000000.00 – 9999999.99**.
Numeric, 9 positions, optional.
Reference: Card 09, field 066.

77 – 80   Not used.

Form 20 – Master Conversion Input

Purpose
This form, in conjunction with Cards 00 – 07 on Form 20 (Master Record New or Maintenance), is used for converting accounts from an old system to the Time Investment system. Specifically, monetary balances, processing information, and up to nine days of bank and customer float for each account are entered on this input form. Some fields are required. If information is not available for a particular field and the field is required, enter zeros for numeric and spaces for alphanumeric fields.

Note: The documentation for references to Card 09 can be found in the Application Forms chapter of *Procedures Guide 1*.

Cards Required
None

Header Portion of Each Card

1 – 2
System Number. Valid entry is **08**.
Numeric, 2 positions, required.

3 – 5
Institution Number. Valid entries are **001 – 999**.
Numeric, 3 positions, required.

6 – 15
Master account number of the account being converted to the system. Leading blanks are permitted.
Numeric, 10 positions, required.

16 – 21
Not used.

22 – 23
Form Number. Valid entry is **20**.
Numeric, 2 positions, required.

24 – 25
Card Number. Valid entries are **10 – 29**.
Numeric, 2 positions, required.

Card 10

26 – 40
Aggregate Balance. Balance for the current month. Two decimal places are assumed. Leading blanks are permitted.
Numeric, 15 positions, required.
Reference: Card 09, field 069.

41 – 49
Average Balance 01. Average balance for the previous January, in dollars only. Leading blanks are permitted.
Numeric, 9 positions, optional.
Reference: Card 09, field 071.

50 – 58	Average Balance 02. Average balance for the previous February, in dollars only. Leading blanks are permitted. *Numeric, 9 positions, optional.* Reference: Card 09, field 071.
59 – 67	Average Balance 03. Average balance for the previous March, in dollars only. Leading blanks are permitted. *Numeric, 9 positions, optional.* Reference: Card 09, field 071.
68 – 76	Average Balance 04. Average balance for the previous April, in dollars only. Leading blanks are permitted. *Numeric, 9 positions, optional.* Reference: Card 09, field 071.
77 – 80	Not used.

Card 11

26 – 34	Average Balance 05. Average balance for the previous May, in dollars only. Leading blanks are permitted. *Numeric, 9 positions, optional.* Reference: Card 09, field 071.
35 – 43	Average Balance 06. Average balance for the previous June, in dollars only. Leading blanks are permitted. *Numeric, 9 positions, optional.* Reference: Card 09, field 071.
44 – 52	Average Balance 07. Average balance for the previous July, in dollars only. Leading blanks are permitted. *Numeric, 9 positions, optional.* Reference: Card 09, field 071.
53 – 61	Average Balance 08. Average balance for the previous August, in dollars only. Leading blanks are permitted. *Numeric, 9 positions, optional.* Reference: Card 09, field 071.
62 – 70	Average Balance 09. Average balance for the previous September, in dollars only. Leading blanks are permitted. *Numeric, 9 positions, optional.* Reference: Card 09, field 071.
71 – 79	Average Balance 10. Average balance for the previous October, in dollars only. Leading blanks are permitted. *Numeric, 9 positions, optional.* Reference: Card 09, field 071.

80   Not used.

Card 12

26 – 34   Average Balance 11. Average balance for the previous November, in dollars
                             only. Leading blanks are permitted.
                             Numeric, 9 positions, optional.
                             Reference: Card 09, field 071.

35 – 43   Average Balance 12. Average balance for the previous December, in dollars
                             only. Leading blanks are permitted.
                             Numeric, 9 positions, optional.
                             Reference: Card 09, field 071.

44 – 56   Current Balance. Two decimal places are assumed. Leading blanks are
                             permitted.
                             Numeric, 13 positions, required.

57 – 71   Aggregate Collected Balance. Aggregate collected balance for the current month.
                             Two decimal places are assumed. Leading blanks are permitted.
                             Numeric, 15 positions, optional.
                             Reference: Card 09, field 070.

72 – 80   Average Collected 01. Average collected balance for the previous January, in
                             dollars only. Leading blanks are permitted.
                             Numeric, 9 positions, optional.
                             Reference: Card 09, field 072.

Card 13

26 – 34   Average Collected 02. Average collected balance for the previous February, in
                             dollars only. Leading blanks are permitted.
                             Numeric, 9 positions, optional.
                             Reference: Card 09, field 072.

35 – 43   Average Collected 03. Average collected balance for the previous March, in
                             dollars only. Leading blanks are permitted.
                             Numeric, 9 positions, optional.
                             Reference: Card 09, field 072.

44 – 52   Average Collected 04. Average collected balance for the previous April, in
                             dollars only. Leading blanks are permitted.
                             Numeric, 9 positions, optional.
                             Reference: Card 09, field 072.

53 – 61	Average Collected 05. Average collected balance for the previous May, in dollars only. Leading blanks are permitted. *Numeric, 9 positions, optional*. Reference: Card 09, field 072.
62 – 70	Average Collected 06. Average collected balance for the previous June, in dollars only. Leading blanks are permitted. *Numeric, 9 positions, optional*. Reference: Card 09, field 072.
71 – 79	Average Collected 07. Average collected balance for the previous July, in dollars only. Leading blanks are permitted. *Numeric, 9 positions, optional*. Reference: Card 09, field 072.
80	Not used.

Card 14

26 – 34	Average Collected 08. Average collected balance for the previous August, in dollars only. Leading blanks are permitted. *Numeric, 9 positions, optional*. Reference: Card 09, field 072.
35 – 43	Average Collected 09. Average collected balance for the previous September, in dollars only. Leading blanks are permitted. *Numeric, 9 positions, optional*. Reference: Card 09, field 072.
44 – 52	Average Collected 10. Average collected balance for the previous October, in dollars only. Leading blanks are permitted. *Numeric, 9 positions, optional*. Reference: Card 09, field 072.
53 – 61	Average Collected 11. Average collected balance for the previous November, in dollars only. Leading blanks are permitted. *Numeric, 9 positions, optional*. Reference: Card 09, field 072.
62 – 70	Average Collected 12. Average collected balance for the previous December, in dollars only. Leading blanks are permitted. *Numeric, 9 positions, optional*. Reference: Card 09, field 072.
71 – 79	Original Interest Rate. Original interest rate at issue or last renewal date. *Numeric, 9 positions, optional*. Reference: Card 09, field 101.

80	Not used.

Card 15

26 – 31	Date Overdrawn. Date this account became overdrawn. Format is MMDDYY. *Numeric, 6 positions, optional.* Reference: Card 09, field 073.
32 – 33	Times Overdrawn this Month. Number of times the account became overdrawn during the current month. *Numeric, 2 positions, optional.* Reference: Card 09, field 074.
34 – 57	Time Overdrawn by Month. Number of times the account became overdrawn during each month. The numbers above the field (01 – 12) on the form master corresponds with the months January through December. *Numeric, 2 positions (12 times), optional.* Reference: Card 09, field 076.
58 – 70	Statement ENP. Statement period interest earned. Amount of interest accrued for the current statement period. *Numeric, 13 positions, optional.*
71 – 80	Not used.

Card 16

26 – 27	Days Overdrawn this Month. Number of days the account became overdrawn during the current month. *Numeric, 2 positions, optional.* Reference: Card 09, field 075.
28 – 51	Days Overdrawn by Month. Number of days the account became overdrawn during each month. The number above the field, (01 – 12) corresponds with the months January through December. *Numeric, 2 positions (12 times), optional.* Reference: Card 09, field 077.
52 – 57	Date Last Statement. Date the last statement was printed. Format is MMDDYY. *Numeric, 6 positions, required.* Reference: Card 09, field 078.
58 – 70	Statement Beginning Balance. Current balance as of the last cutoff statement in dollars and cents. If a passbook account, this represents the passbook balance. Leading blanks are permitted. Valid entry is zeros. *Numeric, 13 positions, required.*

71 – 79	Service Charge Items. Number of items deposited to this account since the last service charge. *Numeric, 9 positions, optional.* Reference: Card 09, field 120.
80	Not used.

Card 17

26 – 31	Date Last Service Charge. Date the last service charge was assessed. Format is MMDDYY. *Numeric, 6 positions, required.* Reference: Card 09, field 079.
32 – 38	Number of Service Charge Debits. Number of service chargeable debits processed since the last service charge date. *Numeric, 7 positions, optional.* Reference: Card 09, field 081.
39 – 42	Number of Service Charge Credits. Number of service chargeable credits processed since the last service charge date. *Numeric, 4 positions, optional.* Reference: Card 09, field 082.
43 – 51	Service Charge Low Balance. Low balance for the account during the current service charge period in whole dollars. Leading blanks are permitted. *Numeric, 9 positions, optional.* Reference: Card 09, field 083.
52 – 60	Service Charge Previous Low Balance. Low balance for the account during the previous service charge period in whole dollars. Leading blanks are permitted. *Numeric, 9 positions, optional.* Reference: Card 09, field 084.
61 – 73	Service Charge Aggregate Balance. Aggregate balance for the current service charge period. Two decimal places are assumed. Leading blanks are permitted. *Numeric, 13 positions, optional.* Reference: Card 09, field 085.
74 – 77	Service Charge Checks. Number of checks produced for this account since the last service charge. *Numeric, 4 positions, optional.* Reference: Card 09, field 119.
78 – 80	Not used.

Card 18

26 – 38	**Service Charge Aggregate Collected Balance.** Aggregate collected balance for the current service charge period. Two decimal places are assumed. Leading blanks are permitted. *Numeric, 13 positions, optional.* Reference: Card 09, field 086.

39	**January Service Charge Code.** Service charge disposition code for the month. Valid entries are:

    A   Charge.
    B   Bill.
    C   Charge another account.
    R   Review.
    W   Waive.
Alphanumeric, 1 position, optional.
Reference: Card 09, field 080.

40 – 46	**January Service Charge Amount.** Amount for the month. *Numeric, 7 positions optional.* Reference: Card 09, field 080.

47	**February Service Charge Code.** Service charge disposition code for the month. Valid entries are:

    A   Charge.
    B   Bill.
    C   Charge another account.
    R   Review.
    W   Waive.
Alphanumeric, 1 position, optional.
Reference: Card 09, field 080.

48 – 54	**February Service Charge Amount.** Service charge amount for the month. *Numeric, 7 positions optional.* Reference: Card 09, field 080.

55	**March Service Charge Code.** Service charge disposition code for the month. Valid entries are:

    A   Charge.
    B   Bill.
    C   Charge another account.
    R   Review.
    W   Waive.
Alphanumeric, 1 position, optional.
Reference: Card 09, field 080.

56 – 62	**March Service Charge Amount.** Service charge amount for the month. *Numeric, 7 positions optional.* Reference: Card 09, field 080.

63	April Service Charge Code. Service charge disposition code for the month. Valid entries are:
	A Charge.
	B Bill.
	C Charge another account.
	R Review.
	W Waive.
	Alphanumeric, 1 position, optional.
	Reference: Card 09, field 080.
64 – 70	April Service Charge Amount. Service charge amount for the month.
	Numeric, 7 positions optional.
	Reference: Card 09, field 080.
71	May Service Charge Code. Service charge disposition code for the month. Valid entries are:
	A Charge.
	B Bill.
	C Charge another account.
	R Review.
	W Waive.
	Alphanumeric, 1 position, optional.
	Reference: Card 09, field 080.
72 – 78	May Service Charge Amount. Service charge amount for the month.
	Numeric, 7 positions optional.
	Reference: Card 09, field 080.
79 – 80	Not used.

Card 19

26	June Service Charge Code. Service charge disposition code for the month. Valid entries are:
	A Charge.
	B Bill.
	C Charge another account.
	R Review.
	W Waive.
	Alphanumeric, 1 position, optional.
	Reference: Card 09, field 080.
27 – 33	June Service Charge Amount. Service charge amount for the month.
	Numeric, 7 positions optional.
	Reference: Card 09, field 080.

34	July Service Charge Code. Service charge disposition code for the month. Valid entries are:

       A   Charge.
       B   Bill.
       C   Charge another account.
       R   Review.
       W   Waive.
Alphanumeric, 1 position, optional.
Reference: Card 09, field 080.

35 – 41	July Service Charge Amount. Service charge amount for the month.

Numeric, 7 positions optional.
Reference: Card 09, field 080.

42	August Service Charge Code. Service charge disposition code for the month. Valid entries are:

       A   Charge.
       B   Bill.
       C   Charge another account.
       R   Review.
       W   Waive.
Alphanumeric, 1 position, optional.
Reference: Card 09, field 080.

43 – 49	August Service Charge Amount. Service charge amount for the month.

Numeric, 7 positions optional.
Reference: Card 09, field 080.

50	September Service Charge Code. Service charge disposition code for the month. Valid entries are:

       A   Charge.
       B   Bill.
       C   Charge another account.
       R   Review.
       W   Waive.
Alphanumeric, 1 position, optional.
Reference: Card 09, field 080.

51 – 57	September Service Charge Code. Service charge amount for the month.

Numeric, 7 positions optional.
Reference: Card 09, field 080.

58	October Service Charge Code. Service charge disposition code for the month. Valid entries are:
	A Charge.
	B Bill.
	C Charge another account.
	R Review.
	W Waive.
	Alphanumeric, 1 position, optional.
	Reference: Card 09, field 080.
59 – 65	October Service Charge Amount. Service charge amount for the month.
	Numeric, 7 positions optional.
	Reference: Card 09, field 080.
66	November Service Charge Code. Service charge disposition code for the month. Valid entries are:
	A Charge.
	B Bill.
	C Charge another account.
	R Review.
	W Waive.
	Alphanumeric, 1 position, optional.
	Reference: Card 09, field 080.
67 – 73	November Service Charge Amount. Service charge amount for the month.
	Numeric, 7 positions optional.
	Reference: Card 09, field 080.
74 – 80	Not used.

Card 20

26	December Service Charge Code. Service charge disposition code for the month. Valid entries are:
	A Charge.
	B Bill.
	C Charge another account.
	R Review.
	W Waive.
	Alphanumeric, 1 position, optional.
	Reference: Card 09, field 080.
27 – 33	December Service Charge Amount. Service charge amount for the month.
	Numeric, 7 positions optional.
	Reference: Card 09, field 080.

34 – 39	Last Renewal Date. Date the account was last renewed. Format is MMDDYY. If the account has not renewed, enter zeros. *Numeric, 6 positions, required.* Reference: Card 09, field 087.
40 – 45	First Renewal Date. Date the account was first renewed. Zeros may be valid for this field. Format is MMDDYY. *Numeric, 6 positions, required.* Reference: Card 09, field 088.
46 – 52	Available Interest. Amount of interest paid and capitalized on this account that has not been withdrawn. *Numeric, 7 positions, optional.*
53 – 63	Last Renewal Balance. The balance in the account as of the last renewal date. *Numeric, 11 positions, optional.*
64 – 69	Federal Tax B-Notice Date. *Numeric, 6 positions, optional.* Reference: Card 09, field 141.
70 – 75	Federal Tax Expiration Date. Expiration date for a B-Notice received, awaiting TIN certification or non-resident alien exemption period. *Numeric, 6 positions, optional.*
76 – 80	Not used.

Card 21

26 – 34	Current OID Period Interest Paid. Amount of interest paid during the current renewal period or current maturity term for an OID Certificate of Deposit. *Numeric, 9 positions, optional.* Reference: Card 09, field 089.
35 – 43	Current OID Period Interest Reported. Amount of interest reported for tax purposes during the current renewal period or current maturity term for an OID Certificate of Deposit. *Numeric, 9 positions, optional.* Reference: Card 09, field 090.
44 – 50	Current OID Period Monthly Ratable Portion. Amount of interest to be reported for each month of the year for tax purposes for an OID Certificate of Deposit. *Numeric, 7 positions, optional.* Reference: Card 09, field 091.
51 – 59	Interest Paid to Date. Total amount of interest paid life to date on this account. *Numeric, 9 positions, optional.*

60 – 68	Interest Penalty Reduction. Interest penalty reduction amount for this account. *Numeric, 9 positions, optional.* Reference: Card 09, field 145.
69 – 77	Interest 1099 Penalty. Amount of interest penalty accessed last year. *Numeric, 9 positions, optional.* Reference: Card 09, field 100.
78 – 80	Not used.

Card 22

26 – 34	Previous OID Period Interest Paid. Amount of interest paid during the previous renewal period/term for an OID Certificate of Deposit. *Numeric, 9 positions, optional.* Reference: Card 09, field 092.
35 – 43	Previous OID Period Interest Reported. Amount of interest reported for tax purposes during the previous renewal period/term for an OID Certificate of Deposit. *Numeric, 9 positions, optional.* Reference: Card 09, field 093.
44 – 50	Previous OID Period Monthly Ratable Portion. Amount of interest to be reported for each month of the year for tax purposes for an OID Certificate of Deposit (previous renewal period). *Numeric, 7 positions, optional.* Reference: Card 09, field 094.
51 – 56	Previous OID Period Beginning Date. Beginning date for the previous renewal period. Format is MMDDYY. *Numeric, 6 positions, optional.* Reference: Card 09, field 095.
57 – 62	Previous OID Period Ending Date. Ending date for the previous renewal period. Format is MMDDYY. *Numeric, 6 positions, optional.* Reference: Card 09, field 096.
63 – 71	Federal Tax Withheld Year-to-date. For retirement accounts, amount of disbursement tax withheld year-to-date (Tran Code 925). For non-retirement accounts, amount of federal tax withheld year- to-date (Tran Code 920). *Numeric, 9 positions, optional.*
72 – 80	Federal Tax Withheld 1099. Amount of federal tax withheld and reported on the 1099 form. *Numeric, 9 positions, optional.* Reference: Card 09, field 133.

Card 23

26 – 36	Interest Paid Year-to-date. Amount of interest paid year to date for the current year. *Numeric, 11 positions, required.*
37 – 45	Interest Penalty Year-to-date. Amount of interest penalty assessed during the current year. *Numeric, 9 positions, optional.*
46 – 58	Interest Earned not Paid. Amount of interest earned since the last interest payment date. *Numeric, 13 positions, required.*
59 – 75	Aggregate Rate. Aggregate rate of interest for the current renewal period. *Numeric, 12 positions, optional.* Reference: Card 09, field 102.
76 – 80	Not used.

Card 24

26 – 36	Interest 1099. Amount of interest paid last year. *Numeric, 11 positions, optional.* Reference: Card 09, field 098.
37 – 45	Interest Paid. Amount of interest paid on the last interest payment date. *Numeric, 9 positions, optional.* Reference: Card 09, field 121.
46 – 58	Interest Compounding Amount. Amount of interest to be compounded on the next compounding date. Must be zeros if Compounding Frequency is `N'. *Numeric, 13 positions, optional.* Reference: Card 09, field 103.
59 – 64	Last Rate Change Date. Format is MMDDYY. *Numeric, 6 positions, optional.*
65 – 79	Interest Aggregate. Aggregate balance for the current interest period, used to calculate an average balance. *Numeric, 15 positions, required.*
80	Not used.

Card 25

26 – 34	Customer Float Amount 1 Day. Amount total for 1-day float items as of the conversion date, in whole dollars. Leading blanks are permitted. *Numeric, 9 positions, optional*. Reference: Card 09, field 116.
35 – 41	Customer Float Amount 2 Day. Amount totals for 2 day float items as of the conversion date, in whole dollars. Leading blanks are permitted. *Numeric, 7 positions, optional*. Reference: Card 09, field 116.
42 – 48	Customer Float Amount 3 Day. Amount totals for 3 day float items as of the conversion date, in whole dollars. Leading blanks are permitted. *Numeric, 7 positions, optional*. Reference: Card 09, field 116.
49 – 55	Customer Float Amount 4 Day. Amount totals for 4 day float items as of the conversion date, in whole dollars. Leading blanks are permitted. *Numeric, 7 positions, optional*. Reference: Card 09, field 116.
56 – 60	Customer Float Amount 5 Day. Amount totals for 5-day float items as of the conversion date, in whole dollars. Leading blanks are permitted. *Numeric, 5 positions, optional*. Reference: Card 09, field 116.
61 – 65	Customer Float Amount 6 Day. Amount totals for 6-day float items as of the conversion date, in whole dollars. Leading blanks are permitted. *Numeric, 5 positions, optional*. Reference: Card 09, field 116.
66 – 70	Customer Float Amount 7 day. Amount totals for 7-day float items as of the conversion date, in whole dollars. Leading blanks are permitted. *Numeric, 5 positions, optional*. Reference: Card 09, field 116.
71 – 75	Customer Float Amount 8 Day. Amount totals for 8-day float items as of the conversion date, in whole dollars. Leading blanks are permitted. *Numeric, 5 positions, optional*. Reference: Card 09, field 116.
76 – 80	Customer Float Amount 9 Day. Amount totals for 9-day float items as of the conversion date, in whole dollars. Leading blanks are permitted. *Numeric, 5 positions, optional*. Reference: Card 09, field 116.

Card 26

26 – 34   Bank Float Amount 1 Day. Amount total for 1-day float items as of the conversion date, in whole dollars. Leading blanks are permitted.
Numeric, 9 positions, optional.
Reference: Card 09, field 115.

35 – 41   Bank Float Amount 2 Day. Amount totals for 2-day float items as of the conversion date, in whole dollars. Leading blanks are permitted.
Numeric, 7 positions, optional.
Reference: Card 09, field 115.

42 – 48   Bank Float Amount 3 Day. Amount totals for 3-day float items as of the conversion date, in whole dollars. Leading blanks are permitted.
Numeric, 7 positions, optional.
Reference: Card 09, field 115.

49 – 55   Bank Float Amount 4 Day. Amount totals for 4-day float items as of the conversion date, in whole dollars. Leading blanks are permitted.
Numeric, 7 positions, optional.
Reference: Card 09, field 115.

56 – 60   Bank Float Amount 5 Day. Amount totals for 5-day float items as of the conversion date, in whole dollars. Leading blanks are permitted.
Numeric, 5 positions, optional.
Reference: Card 09, field 115.

61 – 65   Bank Float Amount 6 Day. Amount totals for 6-day float items as of the conversion date, in whole dollars. Leading blanks are permitted.
Numeric, 5 positions, optional.
Reference: Card 09, field 115.

66 – 70   Bank Float Amount 7 Day. Amount totals for 7-day float items as of the conversion date, in whole dollars. Leading blanks are permitted.
Numeric, 5 positions, optional.
Reference: Card 09, field 115.

71 – 75   Bank Float Amount 8 Day. Amount totals for 8-day float items as of the conversion date, in whole dollars. Leading blanks are permitted.
Numeric, 5 positions, optional.
Reference: Card 09, field 115.

76 – 80   Bank Float Amount 9 Day. Amount totals for 9-day float items as of the conversion date, in whole dollars. Leading blanks are permitted.
Numeric, 5 positions, optional.
Reference: Card 09, field 115.

Card 27

26 – 31	Dormant Date. Date this account became inactive or dormant. Format is MMDDYY. *Numeric, 6 positions, optional.* Reference: Card 09, field 105.
32 – 37	Activity Date. Date of the last monetary transaction activity for this account. Format is MMDDYY. *Numeric, 6 positions, optional.* Reference: Card 09, field 112.
38 – 43	Maintenance Date. Date of last maintenance to this account. Format is MMDDYY. *Numeric, 6 positions, optional.*
44 – 49	Contact Date. Date of last customer contact for this account. This date is used for inactive or dormant processing. Format is MMDDYY. *Numeric, 6 positions, optional.* Reference: Card 09, field 114.
50 – 55	Last Interest Date. Date of the last interest payment for this account. Format is MMDDYY. *Numeric, 6 positions, required.* Reference: Card 09, field 122.
56 – 68	Interest Cutoff Balance. The balance in the account as of the last interest payment. *Numeric, 13 positions, required.*
69	Account Status. Valid entries are: **ƀ** Open and processing. **C** Closed. **M** Matured. **P** Purged. *Alphanumeric, 1 position, optional.* **Note:** Although **M** is valid, it is moved to the TIMST-MATURED field instead of the TIMST-MSTATUS field.
70 – 72	Accrued Days. Number of extra days the system must accrue in the first processing run after conversion to bring the account current. If converting from a 'Last Day' accrual system, type **001**. This makes the Accrue Through date one day less than the conversion date, causing the system to accrue one extra day in the first posting run after conversion. *Numeric, 3 positions, optional.*

73 – 79	Last Federal Tax Amount. Amount of federal tax withheld from the last interest payment. *Numeric, 7 positions, optional.* Reference: Card 09, field 134.
80	Not used.

Card 28

26 – 31	Social Security Frequency 1 Date. Date of the first request for a valid Tax ID number. Format is MMDDYY. *Numeric, 6 positions, optional.* Reference: Card 09, field 147.
32 – 37	Social Security Frequency 2 Date. Date of the second request for a valid Tax ID number. Format is MMDDYY. *Numeric, 6 positions, optional.* Reference: Card 09, field 148.
38 – 46	Mandatory Federal Tax Amount. Amount of federal tax that is withheld if an IRS withdrawal is made prior to the Federal Tax Expiration Date. Leading blanks are permitted. *Numeric, 9 positions, optional.* Reference: Card 09, field 149.
47 – 52	Federal Tax Status Change Date. Date the Federal Tax Exemption code was changed. Format is MMDDYY. *Numeric, 6 positions, required.* Reference: Card 09, field 150.
53 – 62	Previous Account Number. Account number of the account closed as part of the re-issue process. *Numeric, 10 positions, optional.*
63 – 72	New Account Number. Account number of the account closed as part of the re-issue process. Valid only for accounts re-issued using IREI. *Numeric, 10 positions, optional.* Reference: Card 09, field 126.
73 – 80	Not used.

Card 29

26 – 34	Renewal Rate. Rate used once an account's grace period expires. Valid entries are **000000000 – 999999999**. *Numeric, 9 positions, optional.*

35	Renewal Use Code. Indicates if this account is to renew into a new account type, and how the Renewal Effective Date, Renewal Type, and Renewal Interest Frequency/Term/Day/Disposition fields are to be used. Valid entries are:

B   Use MICM Record 3501 defaults as they are at the time the TIRENEW takes affect for the interest and renewal fields. For the remaining fields, use the values entered in the New Term column.

I   Use MICM Record 3501 defaults as they are at the time the TIRENEW takes affect for the interest frequency, term, day, and disposition. For the remaining fields, use the values entered in the New Term column.

N   Do not initiate the renewal based on the information on TIRENEW.

R   Use MICM Record 3501 defaults as they are at the time the TIRENEW takes affect for the renewal frequency, term, and day. For the remaining fields, use the values entered in the New Term column.

X   Initiate the renewal based on the information on TIRENEW.

Alphanumeric, 1 position, optional.

36 – 41   Renewal Effective Date. Date to renew the account. Must be zeros if the Renewal Use Code is 'N'.
Numeric, 6 positions, optional.

42 – 44   Renewal New Type. New type assigned to the account. When the account renews, it picks up the new defaults, based on the Renewal Use Code. Valid entries are **000 – 999**.
Numeric, 3 positions, optional.

45   Renewal Interest Frequency. The Renewal Interest Frequency is moved to the Interest Frequency when the account renews and the Renewal Use Code is 'E'. Valid entries are:

D   Days.
M   Months.
N   None.

Alphanumeric, 1 position, optional.

46 – 48   Renewal Interest Term. The Renewal Interest Term is moved to the Interest Term when the Renewal Use Code is 'E'. Valid entries are **001 – 999**.
Numeric, 3 positions, optional.

49 – 50   Renewal Interest Day. The Renewal Interest Day is moved to the Interest Day when the Renewal Use Code is 'E'. Valid entries are **00 – 31**.
Numeric, 2 positions, optional.

51   Renewal Interest Disposition. The Renewal Interest Disposition is moved to the Interest Disposition when the account renews and the Renewal Use Code is 'E'. Valid entries are:

C   Capitalize the interest.
P   Pay by check.
T   Transfer to another account.

Alphanumeric, 1 position, optional.

52	Grace Flag. Indicates if an account is in its grace period. On the renewal date, the flag is set to **Y**, and remains at that setting until the end of the grace period, at which time it is set to **N**. A deposit or withdrawal forces the end of the grace period. Valid entries are:

    N   Account is not in the grace period.
    Y   Account is in the grace period.
Alphanumeric, 1 position, optional.

53 – 65	Grace Interest Earned Not Paid. Amount of accrued interest at the beginning of the grace period. Valid entries are **00000000.00000 – 99999999.99999**. *Numeric, 13 positions, optional.* Required at conversion if account is in grace period.

66 – 78	Post-grace Compounding Amount. For simple interest accounts, accruals are done on the current balance plus the compounding amount. On the compounding date, the grace interest earned not paid is moved to this field. This allows the account to accrue at the 'post-grace' rate on the 'post-grace' interest the account has already accrued, but not yet paid. When interest is paid, this amount is reduced by the paid amount. *Numeric, 13 positions, optional.*

79 – 80	Not used.

Form 20 – Transaction Conversion

Purpose | This form is used for converting transaction history to Time Investment. Description fields are provided for transactions requiring additional information other than what was provided on MICM Record 2013 (Transaction Code Parameters).

Cards Required | 75 and 76

Header Portion of Each Card

1 – 2 | System Number. Valid entry is **08**.
Numeric, 2 positions, required.

3 – 5 | Institution Number. Valid entries are **001 – 999**.
Numeric, 3 positions, required.

6 – 15 | Account Number. Account for the transaction being converted. Leading blanks are permitted.
Numeric, 10 positions, required.

16 – 21 | Processing Date. Original date on which the transaction was processed. Format is MMDDYY.
Numeric, 6 positions, required.

22 – 23 | Form Number. Valid entry is **20**.
Numeric, 2 positions, required.

Card 75

26 – 35 | Serial Number or Rate. Serial number of the transaction being converted. Leading blanks are permitted.
Numeric, 10 positions, optional.

36 – 39 | External Transaction Code. Valid entries are **0001 – 9999** or **0000** for internally generated transactions
Numeric, 4 positions, required.

40 – 50 | Transaction Amount. Two decimal places are assumed. Leading blanks are permitted.
Numeric, 11 positions, required.

51 – 56 | Effective Date. Format is MMDDYY.
Numeric, 6 positions, required.

57 – 60	Internal Transaction Code. Valid entries are **0001 – 9999**. Internal transaction codes are defined in MICM Record 0326. *Numeric, 4 positions, required.*

61   Debit/Credit Code. Valid entries are:

0	Credit.
1	Service chargeable credit.
2	Debit reversal.
3	Credit, for which float items are generated.
4	Service chargeable credit, for which float items are generated.
5	Debit reversal, for which float items are generated.
6	Debit.
7	Service chargeable debit.
8	Credit reversal.

Numeric, 1 position, required.

62 – 71	Sequence Number. Sequence assigned to the transaction. *Numeric, 10 positions, optional.*
72 – 80	Not used.

Card 76

26   Passbook Flag. For Passbook accounts only. Indicates whether this transaction has been booked or not. Valid entries are:

ƀ	Not booked.
B	Booked transaction.

Alphanumeric, 1 position, optional.

27 – 31	Transaction Code Sequence Number. For TDOA only. The sequence number of the deposit against which the transaction was posted. *Numeric, 5 positions, optional.*
32 – 35	Source of Input. Transaction source of input. *Numeric, 4 positions, optional.*
36 – 39	Initiation Time. Time the transaction was initiated. Format is HHMM. *Numeric, 4 positions, optional.*
40 – 45	Initiation Date. Date the transaction was initiated. Format is MMDDYY. *Numeric, 6 positions, optional.*
46 – 80	Not used.

Card 77

26 – 55   Transaction Description 1. This is used for further description of a transaction, if needed.
Alphanumeric, 30 positions, optional.

56 – 80   Transaction Description 2. This is used for further description of a transaction, if needed.
Alphanumeric, 25 positions, optional.

Form Masters

This section provides a master set of the conversion batch forms used by Time Investment 8.3. The forms are:

- Form 15 – Customer Control Conversion
- Form 20 – Master Conversion Input
- Form 20 – Transaction Conversion

Time Investment
Customer Control Conversion

FORM
1 **5**
22 23

SYSTEM
0 **8**
1 2

INSTITUTION
3   5

CONTROL NUMBER
6   15

CARD
1 **0**
24 25

YEAR CONTRIBUTIONS

YEAR
26

MAXIMUM
27   35

ROLLOVER
36   44

ROLLOVER DATE
45   50

REGULAR
51   59

REGULAR DATE
60   65

EMPLOYER
66   74

EMPLOYER DATE
75   80

CARD
1 **1**
24 25

YEAR CONTRIBUTIONS

YEAR
26

INSURANCE
27   35

INSURANCE DATE
36   41

OVER CONT FLAG
42

CONTRIBUTIONS AFTER YEAR END
43   49

TRANSFER
50   58

TRANSFER DATE
59   64

BEGINNING BALANCE - JANUARY 1
65   75

CARD
1 **2**
24 25

YEAR CONTRIBUTIONS

YEAR
26

NON-DEDUCTIBLE
27   35

NON-DEDUCTIBLE DATE
36   41

CAPITAL GAIN
42   50

GAIN DATE
51   56

CAPITAL LOSS
57   65

LOSS DATE
66   71

DATE LAST WITHDRAWAL
72   77

CARD
1 **3**
24 25

YEAR WITHDRAWALS

YEAR
26

DISTRIBUTIONS
27   35

ROLLOVER
36   44

NON-DEDUCTIBLE
45   53

EXCESS WITHDRAWALS
54   62

DISBURSEMENT WITHHOLDING
63   71

TRANSFER
72   80

CARD
1 **4**
24 25

LAST SERVICE CHARGE DATE
26   31

LAST PAYMENT DATE
32   37

LASTMAINTENANCE DATE
38   43

LAST ACTIVITY DATE
44   49

DATE OF DEATH
50   57

DOD FLAG
58

MINIMUM PAYOUT LAST YEAR
59   67

MINIMUM PAYOUT THIS YEAR
68   76

Time Investment
Master Conversion Input

FORM

2 0

22 23

SYSTEM **0 8**
1 2

INSTITUTION
3 5

ACCOUNT NUMBER
6 15

CARD **1 0**
24 25

AGGREGATE BALANCE
26 40

AVERAGE BALANCE 01
41 49

AVERAGE BALANCE 02
50 58

AVERAGE BALANCE 03
59 67

AVERAGE BALANCE 04
68 76

CARD **1 1**
24 25

AVERAGE BALANCE 05
26 34

AVERAGE BALANCE 06
35 43

AVERAGE BALANCE 07
44 52

AVERAGE BALANCE 08
53 61

AVERAGE BALANCE 09
62 70

AVERAGE BALANCE 10
71 79

CARD **1 2**
24 25

AVERAGE BALANCE 11
26 34

AVERAGE BALANCE 12
35 43

CURRENT BALANCE
44 56

AGGREGATE COLLECTED BALANCE
57 71

AVERAGE COLLECTED 01
72 80

CARD **1 3**
24 25

AVERAGE COLLECTED 02
26 34

AVERAGE COLLECTED 03
35 43

AVERAGE COLLECTED 04
44 52

AVERAGE COLLECTED 05
53 61

AVERAGE COLLECTED 06
62 70

AVERAGE COLLECTED 07
71 79

CARD **1 4**
24 25

AVERAGE COLLECTED 08
26 34

AVERAGE COLLECTED 09
35 43

AVERAGE COLLECTED 10
44 52

AVERAGE COLLECTED 11
53 61

AVERAGE COLLECTED 12
62 70

ORIGINAL RATE
71 79

SYSTEM
0 8
1   2

INSTITUTION
3   5

ACCOUNT NUMBER
6   15

FORM
2 0
22   23

CARD
1 5
24   25

OVERDRAFT DATE
26   31

TIMES OVERDRAFT
THIS MONTH
32   33

TIMES OVERDRAFT BY MONTH

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |

34   57

STATEMENT ENP
58   70

CARD
1 6
24   25

DAYS OVERDRAFT
THIS MONTH
26   27

DAYS OVERDRAFT BY MONTH

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |

28   51

DATE LAST STATEMENT
52   57

STATEMENT BEGINNING BALANCE
58   70

SERVICE CHARGE ITEMS
71   79

CARD
1 7
24   25

DATE LAST SERVICE CHARGE
26   31

NUMBER OF
SERVICE CHARGE DEBITS
32   38

NUMBER OF
SERVICE CHARGE CREDITS
39   42

SERVICE CHARGE LOW BALANCE
43   51

SERVICE CHARGE PREVIOUS LOW BALANCE
52   60

SERVICE CHARGE AGGREGATE BALANCE
61   73

SERVICE CHARGE
CHECKS
74   77

CARD
1 8
24   25

SERVICE CHARGE AGGREGATE COLLECTED
26   38

SERVICE CHARGE CODE AND AMOUNT BY MONTH

JANUARY
CODE
39
AMOUNT
40   46

FEBRUARY
CODE
47
AMOUNT
48   54

MARCH
CODE
55
AMOUNT
56   62

APRIL
CODE
63
AMOUNT
64   70

MAY
CODE
71
AMOUNT
72   78

Time Investment
Master Conversion Input

FORM

2 **0**

22 23

SYSTEM

0 **8**

1 2

INSTITUTION

3   5

ACCOUNT NUMBER

6   15

CARD

1 **9**

24 25

SERVICE CHARGE CODE AND AMOUNT BY MONTH

JUNE

CODE

AMOUNT

26   27   33

JULY

CODE

AMOUNT

34   35   41

AUGUST

CODE

AMOUNT

42   43   49

SEPTEMBER

CODE

AMOUNT

50   51   57

OCTOBER

CODE

AMOUNT

58   59   65

NOVEMBER

CODE

AMOUNT

66   67   73

CARD

2 **0**

24 25

SERVICE CHARGE CODE AND AMOUNT BY MONTH

DECEMBER

CODE

AMOUNT

26   27   33

LAST RENEWAL DATE

34   39

FIRST RENEWAL DATE

40   45

AVAILABLE INTEREST

46   52

LAST RENEWAL BALANCE

53   63

FEDERAL TAX

B-NOTICE DATE

64   69

EXPIRATION DATE

70   75

CARD

2 **1**

24 25

CURRENT OID PERIOD

INTEREST PAID

26   34

INTEREST REPORTED

35   43

MONTHLY RATABLE PORTION

44   50

INTEREST PAID TO DATE

51   59

INTEREST PENALTY REDUCTION

60   68

INTEREST 1099 PENALTY

69   77

CARD

2 **2**

24 25

PREVIOUS OID PERIOD

INTEREST PAID

26   34

INTEREST REPORTED

35   43

MONTHLY RATABLE PORTION

44   50

BEGINNING DATE

51   56

ENDING DATE

57   62

FEDERAL TAX
WITHHELD YEAR-TO-DATE

62   71

FEDERAL TAX WITHHELD 1099

72   80

CARD

2 **3**

24 25

INTEREST PAID YEAR-TO-DATE

26   36

INTEREST PENALTY YEAR-TO-DATE

37   45

INTEREST EARNED NOT PAID

46   58

AGGREGATE RATE

59   75

FORM

2 0

22 23

SYSTEM

0 8

1 2

INSTITUTION

3 5

ACCOUNT NUMBER

6   15

CARD

2 4

24 25

INTEREST 1099

26   36

INTEREST PAID

37   45
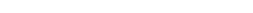
INTEREST COMPOUNDING AMOUNT

46   58

LATE RATE CHANGE DATE

59   64

INTEREST AGGREGATE

65   79

CUSTOMER FLOAT AMOUNT

CARD

2 5

24 25

1 DAY

26   34

2 DAY

35   41

3 DAY

42   48

4 DAY

49   55

5 DAY

56   60

6 DAY

61   65

7 DAY

66   70

8 DAY

71   75

9 DAY

76   80

BANK FLOAT AMOUNT

CARD

2 6

24 25

1 DAY

26   34

2 DAY

35   41

3 DAY

42   48

4 DAY

49   55

5 DAY

56   60

6 DAY

61   65

7 DAY

66   70

8 DAY

71   75

9 DAY

76   80

CARD

2 7

24 25

DORMANT DATE

26   31

ACTIVITY DATE

32   37

MAINTENANCE DATE

38   43

CONTACT DATE

44   49

LAST INTEREST DATE

50   55

INTEREST CUTOFF BALANCE

56   68

ACCOUNT STATUS

69

ACCRUED DAYS

70   72

LAST FEDERAL TAX AMOUNT

73   79

CARD

2 8

24 25

SOCIAL SECURITY FREQUENCY 1 DATE

26   31

SOCIAL SECURITY FREQUENCY 2 DATE

32   37

MANDATORY FEDERAL TAX AMOUNT

38   46

FEDERAL TAX STATUS CHANGE DATE

47   52

PREVIOUS ACCOUNT NUMBER

53   62

NEW ACCOUNT NUMBER

63   72

FORM

2	0

22   23

SYSTEM

0	8

1   2

INSTITUTION

3   5

ACCOUNT NUMBER

6   15

RENEWAL

CARD

2	9

24   25

RATE

26   34

USE CODE

35

EFFECTIVE DATE

36   41

NEW TYPE

42   44

INTEREST DEFAULTS

FREQ

45

TERM

46   48

DAY

49   50

DISP

51

GRACE FLAG

52

GRACE INTEREST EARNED NOT PAID

53   65

GRACE COMPOUNDING AMOUNT

66   78

RENEWAL

CARD

3	0

24   25

FREQ

26

TERM

27   29

DAY

30   31

INTEREST APPL

32   33

INTEREST ACCOUNT

34   43

Time Investment
Transaction Conversion

SYSTEM
0 **8**
1   2

INSTITUTION
3   5

ACCOUNT NUMBER
6   15

PROCESSING DATE
16   21

FORM
2 **0**
22 23

CARD
7 **5**
24 25

SERIAL NUMBER OR RATE
26   35

EXTERNAL
TRANSACTION CODE
36   39

TRANSACTION AMOUNT
40   50

EFFECTIVE DATE
51   56

INTERNAL
TRANSACTION CODE
57   60

DEBIT/
CREDIT
61

SEQUENCE NUMBER
62   71

CARD
7 **6**
24 25

PASSBOOK
FLAG
26

TRANSACTION CODE
SEQUENCE NUMBER
27   31

SOURCE
OF INPUT
32   35

INITIATION

TIME
36   39

DATE
40   45

CARD
7 **7**
24 25

TRANSACTION DESCRIPTION 1
26   55

TRANSACTION DESCRIPTION 2
56   80

Programs

These programs establish processing parameters when converting to the Time Investment 8.3 application. They are run only during the conversion process.

TIC020 – Institution Control File Conversion

Purpose

This program edits the Institution Control Card Image, which is used to create the Institution Control File. After running TIC020, you should back up the newly created Institution Control File.

Note: If you need to rerun this job, you may first need to delete records. Check the output (report 08-901) for card acceptance and date verification.

API MICM Records

Record	Ext Record Code	Name	Description
1001	M74	MI1001-RECORD	Institution Information Record
1300	M79	MI1300-RECORD	Error Message Information Record

API Application Records

Ext Record Code	Name	Description
BNK	TIBNK-RECORD	Institution Control Record

Files

Name	Description	Opened	Media	Access Mode	Record Length
TICRDB	Institution Control Card Image File	Input	Card	Sequential	80
MIMAST	MICM Master File	Input	Disk	Random	Variable
PRINTR	Print File	Output	Printer	Sequential	133

Reports

08-901 – Institution Control File Conversion

Control Card

The control card is required.

Columns	Size	Description
01 – 02	2	System number. Valid entry is **08**.

Columns	Size	Description
03 – 05	3	Institution number.
06 – 21	16	Not used.
22 – 23	2	Form number. Valid entries are **00 – 04**.
24 – 25	2	Card number. Valid entry is **00**.
26 – 31	6	Current date.
32 – 37	6	Last process date.
38 – 43	6	Next scheduled processing date.
44 – 49	6	Next actual processing date.
50 – 56	7	Process week 1 – 7. Valid entries are: **ƀ** Open and processing. **C** Closed, no processing.
57 – 57	1	Process option code. Valid entry is **B**.
58 – 58	1	Line per inch. Valid entries are: **6** Six lines per inch. **8** Eight lines per inch.
59 – 59	1	Selective processing. Valid entries are: **ƀ** Process all institutions. **Y** Process selectively.
60 – 60	1	Print/Fiche code. Valid entries are: **1** Print only. **2** Print and fiche. **3** Fiche only.
61 – 80	20	Not used.

Abort Information

If the program detects a processing irregularity, it displays an abort code on the operator's console and the printer.

Code	Description
0001	ADD failed on BNK.
0002	CLOSE failed on BNK.
0003	CLOSE failed on MIMAST.

TIC040 – Transaction Conversion Edit and Sort

Purpose

This program reads and sorts the Conversion Transaction File and edits each transaction to ensure that all fields contain valid data. The input to TIC040 contains only conversion transactions. The Conversion Transaction Input File can be from card, tape, or disk. The edited transactions are written to the Edited Conversion File. This output can be tape or disk.

A control card is necessary to indicate which media should be used for input and output.

API MICM Records

Record	Ext Record Code	Name	Description
1001	M74	MI1001-RECORD	Institution Information Record
1300	M79	MI1300-RECORD	Error Message Information Record
2013	M13	MI2013-RECORD	Transaction Code Parameters Record

API Application Records

Ext Record Code	Name	Description
BNK	TIBNK-RECORD	Institution Control Record

Files

Name	Description	Opened	Media	Access Mode	Record Length
TICRDI	Card File	Input	Card	Sequential	80
TITAPC	Conversion Transaction (opt.)	Input	Tape	Sequential	80
MIMAST	MICM Master File	Input	Disk	Random	Variable
TIDSKC	Conversion Transaction File (opt.)	Input	Disk	Sequential	80
SORTWK1	Sort Work File	O/I	Disk	Sequential	96
TITRNT	Edited Conversion Transaction File (opt.)	Output	Tape	Sequential	80

Name	Description	Opened	Media	Access Mode	Record Length
TITRND	Edited Conversion Transaction File (opt.)	Output	Disk	Sequential	80
PRINTR	Print File	Output	Printer	Sequential	133

Reports   08-902 – Transaction Conversion Sort and Edit

Control Card   The control card is required.

Columns	Size	Description
01 – 02	2	System number. Valid entry is **08**.
03 – 08	6	Program identification number. Valid entry is **TIC040**.
09 – 09	1	Disk input. Valid entries are: **ƀ** No disk input. **X** Disk input.
10 – 10	1	Tape input. Number of tapes to be used as input. Valid entries are **0 – 9**.
11 – 11	1	Output medium. Valid entries are: **D** Disk. **T** Tape.
12 – 12	1	Print option. Valid entries are: **ƀ** Default to MICM parameters. **A** Print all information. **E** Print errors only.
13 – 80	68	Not used.

Abort Information   If the program detects a processing irregularity, it displays an abort code on the operator's console and the printer.

Code	Description
0001	READ failed on BNK.
0002	Control card is missing.
0003	Program identification number on the control card is invalid.
0004	System number on the control card is invalid.
0005	Disk input on the control card is invalid.

Code	Description
0006	Tape input on the control card is invalid.
0007	Output medium on the control card is invalid.
0008	File space exceeded on TITRND.
0009	File space exceeded on TITRNT.
0010-0011	File space exceeded on TITRND.
0012	START failed on MICM Record 2013, application 08.
0013	READ NEXT failed on MICM Record 2013, application 08.
0014	START failed on MICM Record 2013, application 08.
0015	READ NEXT failed on MICM Record 2013, application 08.
0016	READ NEXT failed on MICM Record 1300.
0017	CLOSE failed on MIMAST.
0018	CLOSE failed on BNK.

TIC060 – Conversion Sort

Purpose
This program reads the card image conversion input from card, disk, or tape. The input is sorted, and a Sorted Card Image Conversion Output File is created. The input to TIC060 consists of all forms used for conversion purposes. This does not include transactions. The output file can be on tape or disk.

API MICM Records
None

API Application Records
None

Files

Name	Description	Opened	Media	Access Mode	Record Length
TICRDI	Card File	Input	Card	Sequential	80
TITAPI	Conversion Input File (opt.)	Input	Tape	Sequential	80
TIDSKI	Conversion Input File	Input	Disk	Sequential	80
SORTWK1	Sort Work File Output File (opt.)	O/I	Disk	Sequential	112
TITAPO	Conversion Output File (opt.)	Output	Tape	Sequential	80
TIDSKO	Conversion Input File	Output	Disk	Sequential	80

Reports
None

Control Card
The control card is required to indicate which media should be used for input and output.

Columns	Size	Description
01 – 02	2	System number. Valid entry is **08**.
03 – 08	6	Program identification number. Valid entry is **TIC060**.
09 – 09	1	Disk input. Valid entries are: ƀ No Disk input. **X** Disk input.
10 – 10	1	Tape input. Number of tapes to be used as input. Valid entries are **0 – 9**.

Columns	Size	Description
11 – 11	1	Output medium. Valid entries are: **D** Disk. **T** Tape.
12 – 80	69	Not used.

Abort Information

If the program detects a processing irregularity, it displays an abort code on the operator's console and the printer.

Code	Description
0001	Control card is missing.
0002	Program identification number on the control card is invalid.
0003	System number on the control card is invalid.
0004	Disk input on the control card is invalid.
0005	Tape input on the control card is invalid.
0006	Output medium on the control card is invalid.
0007	File space exceeded on TIDSKO.

TIC080 – Customer Conversion Input Edit

Purpose This program reads the sorted Card Image Conversion File and edits the customer input to ensure that all fields contain valid data. The payout history is also edited at this time. The Conversion File can be tape or disk. The edited customer input and the edited payout history are written to the Edited Customer Conversion File. This output file can be tape or disk. This program produces report 08-903 (Customer Conversion Input Edit), which is controlled by MICM Record 0307, option flag 3.

API MICM Records

Record	Ext Record Code	Name	Description
0211	M56	MI0211-RECORD	Application Information Record
0231	M83	MI0231-RECORD	Application Edit Table Record
0307	M65	MI0307-RECORD	Application System Report Flags Record
1001	M74	MI1001-RECORD	Institution Information Record
1300	M79	MI1300-RECORD	Error Message Information Record
2001	M01	MI2001-RECORD	Branch Information Record
2021	M21	MI2021-RECORD	Institution Holidays Record
3500	M00	MI3500-RECORD	Time Investment Institution Parameters Record
3506	M06	MI3506-RECORD	Time Investment Title Record

API Application Records

Ext Record Code	Name	Description
BNK	TIBNK-RECORD	Institution Control Record

Files

Name	Description	Opened	Media	Access Mode	Record Length
TICRDI	Card File	Input	Card	Sequential	80
MIMAST	MICM Master File	Input	Disk	Random	Variable

Name	Description	Opened	Media	Access Mode	Record Length
TITAPO	Customer Conversion Output File (opt.)	Input	Tape	Sequential	80
TIDSKO	Customer Conversion Input File (opt.)	Input	Disk	Sequential	80
TIEDCT	Edited Customer Conversion File (opt.)	Output	Tape	Sequential	80
TIEDCD	Edited Customer Conversion File (opt.)	Output	Disk	Sequential	80
PRINTR	Print File	Output	Printer	Sequential	133

Reports   08-903 – Customer Conversion Input Edit

Control Card   The control card is required to indicate which media should be used for input and output.

Columns	Size	Description
01 – 02	2	System number. Valid entry is **08**.
03 – 08	6	Program identification number. Valid entry is **TIC080**.
09 – 09	1	Input medium. Valid entries are: **D** Disk. **T** Tape.
10 – 10	1	Output medium. Valid entries are: **D** Disk. **T** Tape.
11 – 11	1	Print option. Valid entries are: **ƀ** Default to MICM parameters. **A** Print all information. **E** Print errors only.
12 – 80	69	Not used.

Abort Information   If the program detects a processing irregularity, it displays an abort code on the operator's console and the printer.

Code	Description
0001	READ failed on BNK, Institution 000.
0002	Control card is missing.
0003	System number on the control card is invalid.
0004	Program identification number on the control card is invalid.
0005	Input medium on the control card is invalid.
0006	Output medium on the control card is invalid.
0007	CLOSE failed on BNK.
0008	CLOSE failed on MIMAST.
0009	File space exceeded on TIDSKO.
0010	READ failed on MICM Record 1001.
0011	READ failed on MICM Record 2021.
0012	READ failed on MICM Record 3500.
0013	START failed on MICM Record 2001.
0014	READ NEXT failed on MICM Record 2001.
0015	START failed on MICM Record 0231.
0016	MICM Record 0231 Table File exceeded – officer.

TIC100 – Customer Conversion

Purpose	This program reads the Card Image Edited Customer and creates the Conversion Customer Record, Payout History Records, and IRA 'K' Records. This includes the BNK, CST, and MST Records. The Edited Conversion Input File can be tape or disk.

API MICM Records

Record	Ext Record Code	Name	Description
1001	M74	MI1001-RECORD	Institution Information Record
3500	M00	MI3500-RECORD	Time Investment Institution Parameters Record

API Application Records

Ext Record Code	Name	Description
BNK	TIBNK-RECORD	Institution Control Record
CST	TICST-RECORD	Customer Record
IRA	TIIRA-RECORD	IRA/Keogh Record
PAY	TIPAY-RECORD	Customer Payout History Record

Files

Name	Description	Opened	Media	Access Mode	Record Length
TICRDC	Conversion Control Card File	Input	Card	Sequential	80
TIEDCT	Customer Conversion Input (opt.)	Input	Tape	Sequential	80
MIMAST	MICM Master File	Input	Disk	Random	Variable
TIEDCD	Edited Customer Conversion Disk File (opt.)	Input	Disk	Sequential	80
PRINTR	Print File	Output	Printer	Sequential	133

Reports
08-904 – Customer Conversion

Control Card 1   The control card is required to indicate on which medium the input resides. A card is required for each institution being converted. When converting more than one institution, the control cards must be in ascending order by institution.

Columns	Size	Description
01 – 02	2	System number. Valid entry is **08**.
03 – 08	6	Program identification number. Valid entry is **TIC100**.
09 – 09	1	Input medium. Valid entries are: **D** Disk. **T** Tape.
10 – 10	1	Access method. Valid entries are: **D** Database. **V** VSAM – load processing.
11 – 80	70	Not used.

Control Card 2   The control card is required for the suspense customer.

Columns	Size	Description
01 – 02	2	System number. Valid entry is **08**.
03 – 05	3	Institution number.
06 – 10	5	Branch number.
11 – 80	70	Not used.

Abort Information   If the program detects a processing irregularity, it displays an abort code on the operator's console and the printer.

Code	Description
0001	READ failed on BNK, Institution 000.
0002	System number on the control card is invalid.
0003	Program identification on the control card is invalid.
0004	Input medium on the control card is invalid.
0005-0007	Institution number on control card is invalid.
0008	READ failed on MICM Record 1001.
0009	READ failed on MICM Record 3500.
0010	READ failed on BNK, invalid institution number on input.
0011	Form number is not '15' or '16'.

Code	Description
0012	ADD failed on CST.
0013	Missing Form 15, Card 00.
0014	Last card set on Edit File incomplete.
0015	Missing Form 15, Card 01.
0016	Last card set on Edit File incomplete.
0017	Missing Form 15, Card 02.
0018	Last card set on Edit File incomplete.
0019	Missing Form 15, Card 03.
0020	Last card set on Edit File incomplete.
0021	Missing Form 15, Card 04.
0022	Last card set on Edit File incomplete.
0023	Missing Form 15, Card 10.
0024	Missing Form 15, Card 11.
0025	Missing Form 15, Card 12.
0026	Missing Form 15, Card 13, Year 1.
0027	ADD failed on IRA.
0028	Last card set on Edit File incomplete.
0029	Missing Form 15, Card 14.
0030	Missing Form 16, Card 01.
0031	ADD failed on PAY.
0032	READ failed on MICM Record 0001.
0033	READ failed on BNK.
0034	CLOSE failed on MIMAST.
0035	CLOSE failed on BNK.
0036	Access method in column 10 of the control card is invalid.
0037	CLOSE failed on CST.
0038	CLOSE failed on IRA.
0039	CLOSE failed on PAY.

TIC105 – Employer Conversion Input Edit

Purpose

This program reads the card image Conversion File and edits the employer information input to ensure that all fields contain valid data. The Conversion File can be card, tape or disk. The edited employer information input is written to tape or disk. Report 08-911 (Employer Conversion Input Edit) is produced by this program. It shows all employers processed and notes detected errors.

API MICM Records

Record	Ext Record Code	Name	Description
0211	M56	MI0211-RECORD	Application Information Record
0231	M83	MI0231-RECORD	Application Edit Table Record
0307	M65	MI0307-RECORD	Application System Report Flags Record
1001	M74	MI1001-RECORD	Institution Information Record
1300	M79	MI1300-RECORD	Error Message Information Record
2001	M01	MI2001-RECORD	Branch Information Record
3500	M00	MI3500-RECORD	Time Investment Institution Parameters Record
3506	M06	MI3506-RECORD	Time Investment Title Records Record

API Application Records

Ext Record Code	Name	Description
BNK	ANBNK-RECORD	Institution Control Record

Files

Name	Description	Opened	Media	Access Mode	Record Length
TICRDI	Card File	Input	Card	Sequential	80
MIMAST	MICM Master File	Input	Disk	Random	Variable
TIEDET	Edited Employer Conversion File (opt.)	Output	Tape	Sequential	80

Name	Description	Opened	Media	Access Mode	Record Length
TITAPO	Conversion Output File (opt.)	Input	Tape	Sequential	80
TIDSKO	Conversion Input File (opt.)	Input	Disk	Sequential	80
TIEDED	Edited Employer Conversion File (opt.)	Output	Disk	Sequential	80
PRINTR	Print File	Output	Printer	Sequential	133

Reports   08-911 – Employer Conversion Input Edit

Control Card   The control card is required to indicate which medium the input resides on and which medium the output is to be written on.

Columns	Size	Description
01 – 02	2	System number. Valid entry is **08**.
03 – 08	6	Program identification number. Valid entry is **TIC105**.
09 – 09	1	Input medium. Valid entries are: **D** Disk. **T** Tape.
10 – 10	1	Output medium. Valid entries are: **D** Disk. **T** Tape.
11 – 11	1	Print option. Valid entries are: **Ƅ** Default to MICM parameters. **A** Print all information. **E** Print errors only.
12 – 80	69	Not used.

Abort Information   If the program detects a processing irregularity, it displays an abort code on the operator's console and the printer.

Code	Description
0001	READ failed on BNK, Institution 000.
0002	Control card is missing.
0003	System number on the control card is invalid.

Code	Description
0004	Program identification number on the control card is invalid.
0005	Input medium on the control card is invalid.
0006	Output medium on the control card is invalid.
0007	CLOSE failed on BNK.
0008	CLOSE failed on MIMAST.
0009	File space exceeded on Edited Employer Conversion File.
0010	READ failed on MICM Record 1001.
0011	READ failed on MICM Record 0211.
0012	READ failed on MICM Record 3500.
0013	START failed on MICM Record 0231.
0014	MICM Record 0231, Table File exceeded (officer).

TIC110 – Employer Conversion

Purpose

This program reads the card image Edited Employer Conversion File output from TIC105 and creates the Employer Records (EMP). The Edited Employer File can be on tape or disk. The Employer Records created in this program are used in future programs as input/output. Report 08-912 (Employer Conversion) is produced by this program. It shows the total number of Employer Records created.

API MICM Records

Record	Ext Record Code	Name	Description
1001	M74	MI1001-RECORD	Institution Information Record
3500	M00	MI3500-RECORD	Time Investment Institution Parameters Record

API Application Records

Ext Record Code	Name	Description
BNK	TIBNK-RECORD	Institution Control Record
EMP	TIEMP-RECORD	Employer Record

Files

Name	Description	Opened	Media	Access Mode	Record Length
TICRDC	Card File	Input	Card	Sequential	80
TIEDET	Edited Employer Conversion File (opt.)	Input	Tape	Sequential	80
MIMAST	MICM Master File	Input	Disk	Random	Variable
TIEDED	Edited Employer Conversion File (opt.)	Input	Disk	Sequential	80
PRINTR	Print File	Output	Printer	Sequential	133

Reports

08-912 – Employer Conversion

Control Card 1

The control card is required to indicate on which medium the input resides. A card is required for each institution being converted. When converting more than one institution, the control cards must be in ascending order by institution.

Columns	Size	Description
01 – 02	2	System number. Valid entry is **08**.
03 – 08	6	Program identification number. Valid entry is **TIC110**.
09 – 09	1	Input medium. Valid entries are: **D** Disk. **T** Tape.
10 – 10	1	Access method. Valid entries are: **D** Database. **V** VSAM – load processing.
11 – 80	70	Not used.

Control Card 2

The control card is required for the suspense customer..

Columns	Size	Description
01 – 02	2	System number. Valid entry is **08**.
03 – 05	3	Institution number.
06 – 10	5	Branch number.
11 – 80	70	Not used.

Abort Information

If the program detects a processing irregularity, it displays an abort code on the operator's console and the printer.

Code	Description
0001	READ failed on BNK, Institution 000.
0002	System number on the control card is invalid.
0003	Program identification number on the control card is invalid.
0004	Input medium on the control card is invalid.
0005-0007	Institution number on the control card is invalid.
0008	READ failed on MICM Record 1001.
0009	READ failed on MICM Record 3500.
0010	READ failed on BNK.

Code	Description
0011	Form number is not '17'.
0012	Missing Form 17, Card 00.
0013	Last card set on Edit File incomplete.
0014	Missing Form 17, Card 01.
0015	READ failed on MICM Record 1001.
0016	READ failed on BNK.
0017	CLOSE failed on MIMAST.
0018	CLOSE failed on BNK.
0019	ADD failed on EMP.

TIC120 – Master Conversion Input Edit

Purpose

This program reads the Sorted Card Image Conversion File input and edits each entry to ensure that all fields contain valid data. TIC120 edits all form input except customer and payout history (which is done in TIC080). The conversion file can be tape or disk. The output is written to the Edited Conversion File. This output file can be tape or disk. This program produces report 08-905 (Master Conversion Input Edit) which shows all information processed and notes any errors detected. This report is controlled by MICM Record 0307, option flag 3.

API MICM Records

Record	Ext Record Code	Name	Description
0211	M56	MI0211-RECORD	Application Information Record
0231	M83	MI0231-RECORD	Application Edit Table Record
0307	M65	MI0307-RECORD	Application System Report Flags Record
1001	M74	MI1001-RECORD	Institution Information Record
1300	M79	MI1300-RECORD	Error Message Information Record
2001	M01 (MI)	MI2001-RECORD	Branch Information Record
2005	M05	MI2005-RECORD	Cycles Information Record
2021	M21	MI2021-RECORD	Institution Holidays Record
3500	M00	MI3500-RECORD	Time Investment Institution Parameters Record
3501	M01 (TI)	MI3501-RECORD	Time Investment Type Defaults Record
3502	MI02	MI3502-RECORD	Time Investment Time Investment Type Processing Parameters Record
3503	M03	MI3503-RECORD	Time Investment Penalty Routines Record
3504	M04	MI3504-RECORD	Time Investment Interest Rate Tables Record
3507	M07	MI3507-RECORD	Time Investment Service Charge Parameters Record

API Application
Records

Ext Record Code	Name	Description
BNK	TIBNK-RECORD	Institution Control Record
CST	TICST-RECORD	Customer Record

Files

Name	Description	Opened	Media	Access Mode	Record Length
TICRDI	Card File	Input	Card	Sequential	80
MIMAST	MICM Master File	Input	Disk	Random	Variable
TITAPO	Conversion Output File (opt.)	Input	Tape	Sequential	80
TIDSKO	Conversion Input File	Input	Disk	Sequential	80
TIEDMT	Edited Conversion Master File (opt.)	Output	Tape	Sequential	80
TIEDMD	Edited Conversion Master File (opt.)	Output	Disk	Sequential	80
PRINTR	Print File	Output	Printer	Sequential	133

Reports   08-905 – Master Conversion Input Edit

Control Card   The control card is required to indicate which media should be used for input and output.

Columns	Size	Description
01 – 02	2	System number. Valid entry is **08**.
03 – 08	6	Program identification number. Valid entry is **TIC120**.
09 – 09	1	Input medium. Valid entries are: **D** Disk. **T** Tape.
10 – 10	1	Output medium. Valid entries are: **D** Disk. **T** Tape.

Columns	Size	Description
11 – 11	1	Print option. Valid entries are: **ƀ** Default to MICM parameters. **A** Print all information. **E** Print errors only.
12 – 80	69	Not used.

Abort Information

If the program detects a processing irregularity, it displays an abort code on the operator's console and the printer.

Code	Description
0001	READ failed on BNK, Institution 000.
0002	Control card is missing.
0003	System number on the control card is invalid.
0004	Program identification number on the control card is invalid.
0005	Input medium on the control card is invalid.
0006	Output medium on the control card is invalid.
0007	CLOSE failed on MIMAST.
0008	CLOSE failed on BNK.
0009	CLOSE failed on TICST.
0010	READ failed on CST.
0011	READ failed on CST.
0012	File space exceeded on TIEDMD.
0013	READ failed on MICM Record 1001.
0014	READ failed on MICM Record 0211.
0015	READ failed on MICM Record 3500.
0016	START failed on MICM Record 0231.
0017	MICM Record 0231, Table File exceeded – officer.
0018	START failed on MICM Record 0231, Table 07.
0019	READ NEXT failed on MICM Record 0231, Class.
0020	START failed on MICM Record 0231, Table 07.
0021	READ NEXT failed on MICM Record 0231.
0022	START failed on MICM Record 0231.
0023	READ NEXT failed on MICM Record 0231.

Code	Description
0024	READ NEXT failed on MICM Record 0231.
0025	Invalid class entered, MICM Record 0231.
0026	MICM Record 0231, Table File exceeded – class.
0027	START failed on MICM Record 2001.
0028	READ NEXT failed on MICM Record 2001.
0029-0030	LOAD failed on Regional Pricing Records.
0031	START failed on MICM Record 0231.
0032	MICM Record 0231, Table File exceeded – officer 2.
0033	START failed on MICM Record 0231.
0034	MICM Record 0231, Table File exceeded – cost center.
0035	START failed on MICM Record 0231.
0036	MICM Record 0231, Table File exceeded – source of funds.
0037	START failed on MICM Record 0231.
0038	MICM Record 0231, Table File exceeded – alert code 1.
0039	START failed on MICM Record 0231.
0040	MICM Record 0231, Table File exceeded – alert code 2.
0041	START failed on MICM Record 0231.
0042	MICM Record 0231, Table File exceeded – alert code 3.
0043	START failed on MICM Record 0231.
0044	MICM Record 0231, Table File exceeded – alert code 4.
0045	START failed on MICM Record 0231.
0046	MICM Record 0231, Table File exceeded – alert code 5.
0047	START failed on MICM Record 0231.
0048	MICM Record 0231, Table File exceeded – alert code 6.
0049	START failed on MICM Record 0231.
0050	MICM Record 0231, Table File exceeded – map code.

TIC140 – Master Conversion

Purpose

This program reads the Edited Conversion Master File from TIC120 and builds the Account Master Records. In addition, this program reads the edited card image transactions from TIC040 and builds the Transaction Description Records as well as the Transaction History Records. The input card image Conversion Master File and card image Transaction File can be on tape or disk. Additional records are created such as the TDOA Availability Records, the Account Numbers Records, and the Employer Account Numbers Records.

API MICM Records

Record	Ext Record Code	Name	Description
0211	M56	MI0211-RECORD	Application Information Record
1001	M74	MI1001-RECORD	Institution Information Record
2013	M13	MI2013-RECORD	Transaction Code Parameters Record
3500	M35	MI3500-RECORD	Time Investment Institution Parameters Record

API Application Records

Ext Record Code	Name	Description
ACN	TIACN-RECORD	Account Numbers Record
AVL	TIAVL-RECORD	TDOA Availability Record
BNK	TIBNK-RECORD	Institution Control Record
CST	TICST-RECORD	Customer Record
EMN	TIEMN-RECORD	Employer Account Numbers Record
EMP	TIEMP-RECORD	Employer Record
MST	TIMST-RECORD	Account Master Record
TRD	TITRD-RECORD	Transaction Description Record
TRN	TITRN-RECORD	Transaction History Record

Files

Name	Description	Opened	Media	Access Mode	Record Length
TICRDC	Card File	Input	Card	Sequential	80

Name	Description	Opened	Media	Access Mode	Record Length
TIEDMT	Edited Conversion Master File (opt.)	Input	Tape	Sequential	80
TITRNT	Edited Conversion Transaction File (opt.)	Input	Tape	Sequential	80
MIMAST	MICM Master File	Input	Disk	Random	Variable
TIEDMD	Edited Conversion Master File (opt.)	Input	Disk	Sequential	80
TITRND	Edited Conversion Transaction Disk File (opt.)	Input	Disk	Sequential	80
TISORT	Sort File	O/I	Disk	Sequential	67
TITRDC	Conversion Transaction Description File	Output	Disk	Sequential	Variable
PRINTR	Print File	Output	Printer	Sequential	133

Reports

08-906 – Master File Conversion

Control Card 1

The control card is required to indicate on which medium the input resides. A card is required for each institution being converted. When converting more than one institution, the control cards must be in ascending order by institution.

Columns	Size	Description
01 – 02	2	System number. Valid entry is **08**.
03 – 08	6	Program identification number. Valid entry is **TIC140**.
09 – 09	1	Edited Master File conversion input. Valid entries are: **D** Disk. **T** Tape.
10 – 10	1	Transaction File conversion input. Valid entries are: **D** Disk. **T** Tape.
11 – 11	1	Access method. Valid entries are: **D** Database. **V** VSAM – load processing.
12 – 80	69	Not used.

Control Card 2   The control card is required to assign a branch and type number to the suspense account.

Columns	Size	Description
01 – 02	2	System number. Valid entry is **08**.
03 – 05	3	Institution number.
06 – 10	5	Branch number.
11 – 13	3	Type number.
14 – 14	1	Print all indicator. An entry of **X** indicates all accounts are printed.
15 – 80	66	Not used.

Abort Information   If the program detects a processing irregularity, it displays an abort code on the operator's console and the printer.

Code	Description
0001	OPEN failed on CST.
0002	OPEN failed on EMP.
0003	READ failed on BNK.
0004	Control card is missing.
0005	System number on the control card is invalid.
0006	Program identification number on the control card is invalid.
0007	Edited Master File conversion input on the control card is invalid.
0008	Transaction File conversion input on the control card is invalid.
0009	Institution number, branch number, and/or type number for the suspense account on the control card is invalid.
0010	READ failed on MICM Record 1001.
0011	READ failed on MICM Record 0211.
0012	READ failed on MICM Record 3500.
0013	START failed on MICM Record 2013.
0014	READ NEXT failed on MICM Record 2013.
0015	START failed on MICM Record 2013, Application 08.
0016	READ NEXT failed on MICM Record 2013, Application 08.
0017	READ failed on BNK.
0018	Set on Edit File incomplete.

Code	Description
0019	Missing Form 20, Card 01.
0020	Last card set on Edit File incomplete.
0021	Missing Form 20, Card 02.
0022	Last card set on Edit File incomplete.
0023	Missing Form 20, Card 03.
0024	Last card set on Edit File incomplete.
0025	Missing Form 20, Card 04.
0026	Last card set on Edit File incomplete.
0027	Missing Form 20, Card 05.
0028	Last card set on Edit File incomplete.
0029	Missing Form 20, Card 06.
0030	Last card set on Edit File incomplete.
0031	Missing Form 20, Card 07.
0032	Last card set on Edit File incomplete.
0033	Missing Form 20, Card 10.
0034	Last card set on Edit File incomplete.
0035	Missing Form 20, Card 11.
0036	Last card set on Edit File incomplete.
0037	Missing Form 20, Card 12.
0038	Last card set on Edit File incomplete.
0039	Missing Form 20, Card 13.
0040	Last card set on Edit File incomplete.
0041	Missing Form 20, Card 14.
0042	Last card set on Edit File incomplete.
0043	Missing Form 20, Card 15.
0044	Last card set on Edit File incomplete.
0045	Missing Form 20, Card 16.
0046	Last card set on Edit File incomplete.
0047	Missing Form 20, Card 17.
0048	Last card set on Edit File incomplete.
0049	Missing Form 20, Card 18.
0050	Last card set on Edit File incomplete.

Code	Description
0051	Missing Form 20, Card 19.
0052	Last card set on Edit File incomplete.
0053	Missing Form 20, Card 20.
0054	Last card set on Edit File incomplete.
0055	Missing Form 20, Card 21.
0056	Last card set on Edit File incomplete.
0057	Missing Form 20, Card 22.
0058	Last card set on Edit File incomplete.
0059	Missing Form 20, Card 23.
0060	Last card set on Edit File incomplete.
0061	Missing Form 20, Card 24.
0062	Last card set on Edit File incomplete.
0063	Missing Form 20, Card 25.
0064	Last card set on Edit File incomplete.
0065	Missing Form 20, Card 26.
0066	Last card set on Edit File incomplete.
0067	Missing Form 20, Card 27.
0068	Last card set on Edit File incomplete.
0069	Missing Form 20, Card 28.
0070	Last card set on Edit File incomplete.
0071	Missing Form 20, Card 29.
0072	ADD failed on TRN.
0073	ADD failed on TITRDC.
0074	ADD failed on AVL.
0075	READ failed on CST.
0076	ADD failed on ACN.
0077	REWRITE failed on CST.
0078	READ failed on EMP.
0079	ADD failed on EMN.
0080	REWRITE failed on EMP.
0081	Invalid input on TITRND.
0082	READ failed on MICM Record 1001.

Code	Description
0083	READ failed on BNK creating the suspense account.
0084	ADD failed on MST creating the suspense account.
0085	CLOSE failed on MIMAST.
0086	CLOSE failed on BNK.
0087	CLOSE failed on CST.
0088	CLOSE failed on EMP.
0089	Access method on control card is invalid.
0090	ADD failed on TRD.
0091	CLOSE failed on ACN.
0092	CLOSE failed on AVL.
0093	CLOSE failed on EMN.
0094	CLOSE failed on MST.
0095	CLOSE failed on TRN.
0096	CLOSE failed on TRD.
0097	Last card set on Edit File incomplete.
0098	Missing Form 20, Card 08.

TIC160 – Miscellaneous Conversion

Purpose

This program reads the edited card image conversion Master File output from TIC120 and creates the Assignment Record, Statement Copies Record, Interest History Record, and Rate Change History Record. The edited card image conversion Master File input can be on tape or disk.

API MICM Records

Record	Ext Record Code	Name	Description
0211	M56	MI0211-RECORD	Application Information Record
1001	M74	MI1001-RECORD	Institution Information Record

API Application Records

Ext Record Code	Name	Description
ASG	TIASG-RECORD	Assignment/Caution Record
BNK	TIBNK-RECORD	Institution Control Record
INT	TIINT-RECORD	Interest Payment History Record
MST	TIMST-RECORD	Account Master Record
RAT	TIRAT-RECORD	Rate Change History Record
XRL	TIXRL-RECORD	Statement Copies Record

Files

Name	Description	Opened	Media	Access Mode	Record Length
TICRDC	Card File	Input	Card	Sequential	80
TIEDMT	Edited Conversion Master File (opt.)	Input	Tape	Sequential	80
MIMAST	MICM Master File	Input	Disk	Random	Variable
TIEDMD	Edited Conversion Master File (opt.)	Input	Disk	Sequential	80
PRINTR	Print File	Output	Printer	Sequential	133

Reports

08-907 – Miscellaneous Conversion

Control Card   The control card is required to indicate the input medium..

Columns	Size	Description
01 – 02	2	System number. Valid entry is **08**.
03 – 08	6	Program identification number. Valid entry is **TIC160**.
09 – 09	1	Edited Master File conversion input. Valid entries are: **D** Disk. **T** Tape.
10 – 80	71	Not used.

Abort Information   If the program detects a processing irregularity, it displays an abort code on the operator's console and the printer.

Code	Description
0001	OPEN failed on MST.
0002	READ failed on BNK.
0003	Control card is missing.
0004	System number on the control card is invalid.
0005	Program identification number on the control card is invalid.
0006	Edited Master File conversion input on the control card is invalid.
0007	READ failed on MICM Record 1001.
0008	READ failed on MICM Record 0211.
0009	READ failed on BNK.
0010	ADD failed on ASG.
0011	REWRITE failed on MST.
0012	READ failed on XRL.
0013	REWRITE failed on MST.
0014	ADD failed on INT.
0015	REWRITE failed on MST.
0016	ADD failed on RAT.
0017	REWRITE failed on MST.
0018	CLOSE failed on MIMAST.
0019	CLOSE failed on BNK.
0020	CLOSE failed on MST.

Code	Description
0021	CLOSE failed on ASG.
0022	CLOSE failed on XRL.
0023	CLOSE failed on RAT.
0024	CLOSE failed on INT.

TIC170 – Rate Aggregates

Purpose	This program updates the rate aggregates in the Account Master Records. Rate Change Records are read as input and are used to calculate interest rate aggregates, renewal rate aggregates, and statement rate aggregates. You must run this program if calculations require average rates. Rate aggregates are used to compute average rates for specific time periods.
API MICM Records	None

API Application
Records

Ext Record Code	Name	Description
MST	TIMST-RECORD	Account Master Record
RAT	TIRAT-RECORD	Rate Change History Record

Files	None
Reports	None
Control Card	None
Abort Information	If the program detects a processing irregularity, it displays an abort code on the operator's console and the printer.

Code	Description
0001	OPEN failed on MST.
0002	READ NEXT failed on MST.
0003	REWRITE failed on MST.
0004	CLOSE failed on MST.
0005	OPEN failed on RAT.
0006	READ NEXT failed on RAT.
0007	CLOSE failed on RAT.

TIC190 – TDOA Deposit Verification

Purpose

This program reports the differences between the Account Master Record and the TDOA Availability Record for current balance, interest earned not paid, and interest available. Account Master Records with a fixed rate designation are verified against all deposit records for a match on the interest rate.

Note: TIC190 must be run when converting TDOA account references, since TDOA Availability Records cannot be added after conversion.

API MICM Records

Record	Ext Record Code	Name	Description
1001	M74	MI1001-RECORD	Institution Information Record

API Application Records

Ext Record Code	Name	Description
AVL	TIAVL-RECORD	TDOA Availability Record
BNK	TIBNK-RECORD	Institution Control Record
MST	TIMST-RECORD	Account Master Record

Files

Name	Description	Opened	Media	Access Mode	Record Length
MIMAST	MICM Master File	Input	Disk	Random	Variable
PRINTR	Print File	Output	Printer	Sequential	133

Reports

08-910 – TDOA Deposit Verification

Control Card

None

Abort Information

If the program detects a processing irregularity, it displays an abort code on the operator's console and the printer.

Code	Description
0001	OPEN failed on MST.
0002	READ failed on BNK.
0003	READ NEXT failed on MST.

Code	Description
0004	READ failed on MICM Record 1001.
0005	READ failed on AVL.
0006	CLOSE failed on BNK.
0007	CLOSE failed on MIMAST.
0008	CLOSE failed on MST.
0009	CLOSE failed on AVL.

TIC200 – Total File Conversion

Purpose This program reads and sorts the Account Master Records (MST) (created in TIC140) and creates the Total Record – Amount (TA1) and Total Record – Number (TA2) records.

API MICM Records

Record	Ext Record Code	Name	Description
1001	M74	MI1001-RECORD	Institution Information Record

API Application Records

Ext Record Code	Name	Description
BNK	TIBNK-RECORD	Institution Control Record
MST	TIMST-RECORD	Account Master Record
TA1	TITA1-RECORD	Total Record – Amount
TA2	TITA2-RECORD	Total Record – Number

Files

Name	Description	Opened	Media	Access Mode	Record Length
TICARD	Card File	Input	Card	Sequential	80
MIMAST	MICM Master File	Input	Disk	Random	Variable
SORTWK1	Sort Work File	O/I	Disk	Sequential	274
PRINTR	Print File	Output	Printer	Sequential	133

Reports 08-909 – Total File Conversion

Control Card The control card is required.

Columns	Size	Description
01 – 02	2	System number. Valid entry is **08**.
03 – 08	6	Program identification number. Valid entry is **TIC200**.

Columns	Size	Description
09 – 11	3	File option. Valid entries are: ƀ Converts all master records with prior day activity. **ALL** Converts all master records.
12 – 80	69	Not used.

Abort Information   If the program detects a processing irregularity, it displays an abort code on the operator's console and the printer.

Code	Description
0001	READ failed on BNK.
0002	OPEN failed on MST.
0003	READ NEXT failed on MST.
0004	READ failed on BNK.
0005	REWRITE failed on MST.
0006	READ failed on MICM Record 1001.
0007	READ failed on BNK.
0008	READ failed on MICM Record 1001.
0009	READ failed on BNK.
0010	CLOSE failed on MIMAST.
0011	CLOSE failed on BNK.
0012	CLOSE failed on MST.
0013	ADD failed on TA1.
0014	ADD failed on TA2.
0015	OPEN failed on TA1.
0016	OPEN failed on TA2.
0017	CLOSE failed on TA1.
0018	CLOSE failed on TA2.

Reports

The following reports are run during conversion processing.

08-901 – Institution Control File Conversion

Purpose
This report is printed when the Institution Control File is converted. The images of the cards entered are shown. The cards are edited for valid data to insure that field entry requirements are correct. For rejected cards, the names of the fields in error are displayed, along with error codes and messages explaining the reject reasons.

Program
TIC020 – Institution Control File Conversion

```
   06-19-1989                    INSTITUTION CONTROL FILE CONVERSION                         PAGE    1

   TIME INVESTMENT SYSTEM                                                                    08-901
                               2    3         4         5         6         7         8
 SYS BANK                 FORM/ 678901234567890123456789012345678901234567890
 NBR NBR *---KEY DATA---* CARD  *---------------------CARD DATA---------------------* *----FIELD NAME----* *--ERROR MESSAGE---ERR

  08 000                  0000  0127890126890128890012889C     CB6 1                                       ** CARD ACCEPTED **
 -----------------------------------------------------------------------------------------------------------------------------
  08 001                  0000  0127890126890128890012889C     CB6 1                                       ** CARD ACCEPTED **
 -----------------------------------------------------------------------------------------------------------------------------
  08 002                  0000  0127890126890128890012889C     CB6 1                                       ** CARD ACCEPTED **
 -----------------------------------------------------------------------------------------------------------------------------
```

Institution Control File Conversion

Heading Descriptions

Sys Nbr
System Number. Valid entry is **08**.

Institution Nbr
Institution Number.

Form/Card
Form/Card Number. Numbers are used for input.

Card Data
Card Positions 26 through 80. These 55 positions contain the remaining fields on the input form. Refer to the input form descriptions for explanations of these fields.

Field-name
Field Name. Name of the field or group of fields in error.

Error-message
Error Message. Reject reason for an invalid field entry.

Err
Error Message Code.

08-902 – Transaction Conversion Sort and Edit

Purpose   This report is a listing of transaction history input. The card images of the
                       transactions entered are in the report. The cards are edited for valid data to
                       insure that field entry requirements are met. For rejected cards, the names of the
                       fields in error are displayed, along with error codes and messages explaining the
                       reject reasons.

Program   TIC040 – Transaction Conversion Edit and Sort

```
    01-28-1989                      001 FIRST NATIONAL BANK OF AMERICA                             PAGE    1

    TIME INVESTMENT SYSTEM                TRANSACTION CONVERSION SORT AND EDIT                         08-902

                TRAN FORM 2  3       4       5       6       7       8
ACCOUNT-NUMBER  DATE CARD 67890123456789012345678901234567890123456789012345678901234567890  FIELD-NAME      ERROR-MESSAGE     ERR

 000-000-041-1  011088 20 76  000000000
                011088 20 75 0000000000004410000010000011088024000000000000000000000000000
                011088 20 76  000000000
                011088 20 75 0000000000004410000010000011088024000000000000000000000000000
                011088 20 76  000000000
                011088 20 75 0000000000002400000010000011088024000000000000000000000000000
                011088 20 76  000000000
                011088 20 75 0000000000002400000020001011088024000000000000000000000000000
                011088 20 76  000000000
                011088 20 75 0000000000004410000010000021088024000000000000000000000000000
                010489 20 76  000000000
                010489 20 75 0000000000004900000010000010489049000000000000000000000000000

 000-000-041-4  122887 20 76  000000000
                122887 20 75 0000000000005000000002001228870500000000000000000000000000000
                011088 20 76  000000000
                011088 20 75 0000000000004410019000000011088044100000000000000000000000000
                022888 20 76  000000000
                022888 20 75 0000000000005000000002000228880500000000000000000000000000000
                032888 20 76  000000000
                032888 20 75 0000000000005000000002000328880500000000000000000000000000000
                042888 20 76  000000000
                042888 20 75 0000000000005000000002000428880500000000000000000000000000000
                052888 20 76  000000000
                052888 20 75 0000000000005000000002000528880500000000000000000000000000000
                062888 20 76  000000000
                062888 20 75 0000000000005000000002000628880500000000000000000000000000000
                072888 20 76  000000000
                072888 20 75 0000000000005000000002000728880500000000000000000000000000000
                082888 20 76  000000000
                082888 20 75 0000000000005000000002000828880500000000000000000000000000000
                092888 20 76  000000000
                092888 20 75 0000000000005000000002000928880500000000000000000000000000000
                102888 20 76  000000000
                102888 20 75 0000000000005000000002001028880500000000000000000000000000000
                112888 20 76  000000000
                112888 20 75 0000000000005000000002001128880500000000000000000000000000000
                010489 20 76  000000000
                010489 20 75 0000000000009300000002000104890930000000000000000000000000000

 000-000-041-5  032888 20 76  000000000
                032888 20 75 0000000000002400121200200003288802400000000000000000000000000
                042888 20 76  000000000
                042888 20 75 0000000000009000121200200004288809000000000000000000000000000

 000-000-041-1  011088 20 76  000000000
                011088 20 75 0000000000004410000010000011088024000000000000000000000000000  SYSTEM NUMBER   INVALID           *001
```

08-902 – Transaction Conversion Sort and Edit (Details Page)

Heading Descriptions

Account-number   Account Number.

Tran Date   Transaction Date. Date of the transaction.

Form Card   Form/Card Number. Numbers used for input.

(Card Data)   Card Positions 26 through 80. These 55 positions contain the remaining fields of the transaction record.

Field-name   Field Name. Name of the field, or group of fields in error.

Error-message   Error Message. Reject reason for an invalid field entry.

Err   Error Message Code/Error Number. An asterisk printed next to this error number indicates an unacceptable error.

```
    ** TOTALS **
                     *-----TOTAL------*
        ENTERED                    42
        REJECTED                    1
        ACCEPTED                   40
        BYPASSED                    1
        GENERATED                   3
          AMOUNT          5,040,932.02
        DROPPED                     1
```

08-902 – Transaction Conversion Sort and Edit (Totals Page)

Heading Descriptions

Totals   Totals. Total number of cards entered, rejected, generated or accepted, the dollar amount and the total number of dropped records.

08-903 – Customer Conversion Input Edit

Purpose   This report lists Time Investment customer records and the payout history being
                       converted. The card image of the input is shown on the report. The option to
                       print all output or the rejected cards only is given in the control card for TIC080
                       (Customer Conversion Input Edit). The cards are edited for valid data to ensure
                       that field entry requirements for that particular input form are met. For rejected
                       cards, the names of the fields in error are displayed, along with the error codes
                       and messages explaining the reject reasons. The error code explanations are
                       listed at the beginning of the edit report by form number. The card totals for the
                       different types of conversion input are printed at the end of the report.

Program   TIC080 – Customer Conversion Input Edit (controlled by MICM Record 0307 –
                       option flag 3.)

```
   01-28-1989                        001 FIRST NATIONAL BANK OF AMERICA                           PAGE    6
   TIME INVESTMENT SYSTEM                 CUSTOMER CONVERSION INPUT EDIT                             08-903


                     FORM CARD 2   3       4       5       6       7       8
CUSTOMER-NUMBER       NBR  NBR 67890123456789012345678901234567890123456789012345678901234567890  FIELD-NAME       ERROR-MESSAGE         ERR

   0000000511          15   00  JOHNSONM0000      0000                           ANTHONY          1500             015                   104
                       15   01  00001OFFICER01011088052019540000          N     N N5000N          1501             015                   106
                       15   02  0000100PD0070000000000130890000000000000000 0000000LN07P
                       15   03  N00100000000W 0000000000000000000       00000000000000
                       15   10  100020000{00000000000000000000000000000000000000000000
                       15   10  200020000{00000000000000000000000000000000000000000000
                       15   10  300020000{00000000000000000000000000000000000000000000
                       15   10  400020000{00000000000000000000000000000000000000000000
                       15   11  1000000000000000 0000000000000000000000000000000000
                       15   11  2000000000000000 0000000000000000000000000000000000
                       15   11  3000000000000000 0000000000000000000000000000000000
                       15   11  4000000000000000 0000000000000000000000000000000000
                       15   12  10000000000000000000000000000000000000000000000000
                       15   12  20000000000000000000000000000000000000000000000000
                       15   12  30000000000000000000000000000000000000000000000000
                       15   12  40000000000000000000000000000000000000000000000000
                       15   13  10000000000000000000000000000000000000000000000000
                       15   13  20000000000000000000000000000000000000000000000000
                       15   13  30000000000000000000000000000000000000000000000000
                       15   13  40000000000000000000000000000000000000000000000000
                       15   14  000000000000000000011088000000000
-------------------------------------------------------------------------------------------------------------
   0000000511          16   01  103188P000001000000000000003420000000000000P          ANTHONY
-------------------------------------------------------------------------------------------------------------
   0000000511          16   01  113088P000001000000000000003430000000000000P          ANTHONY
-------------------------------------------------------------------------------------------------------------
   0000000511          16   01  123188P000001000000000000003440000000000000P          ANTHONY
-------------------------------------------------------------------------------------------------------------
   0000000511          16   01  013189P000001000000000000003450000000000000O          ANTHONY
-------------------------------------------------------------------------------------------------------------
```

08-903 – Customer Conversion Input Edit (Details Page)

Heading Descriptions

Customer-number   Customer Number. Number assigned to each customer.

Form Nbr   Form Number. Number used for input.

Card Nbr   Card Number. Number on the form used for input.

(Card Data)   Card Positions 26 through 80. These 55 positions contain the remaining fields of
                         the customer accounts and the payout history information.

Field-name   Field Name. Form and card in error.

Error-message   Error Message/Form number. An asterisk (*) before the error code indicates a
                         problem and must be corrected. If no asterisk is present, there is a minor error
                         and no correction is necessary. Only the records without an asterisk are accepted
                         by the system to be processed further.

Err   Error Code Number. Use this code along with the form number under the error-
                         message heading and refer to the error message list at the beginning of the
                         report.

```
01-28-1989                       001 FIRST NATIONAL BANK OF AMERICA                        PAGE     6

TIME INVESTMENT SYSTEM                   CUSTOMER CONVERSION INPUT EDIT                           08-903


** TOTALS **
                           *-----CUSTOMER-INPUT------*      *----PAYOUT-HIST-INPUT----*
              TOTAL-CARDS   NEW-CUSTOMERS                      ADDITIONS
GENERATED          12
ENTERED            13             1                                4
DUPLICATE           0
REJECTED            0             0                                0
ACCEPTED           25             1                                4
```

08-903 – Customer Conversion Input Edit (Totals Page)

Heading Descriptions

Total-cards   Totals are given by file input. Totals that are shown by file are generated,
                         entered, duplicate, rejected and accepted.

08-904 – Customer Conversion

Purpose   This report shows the customer conversion total information for Time
                 Investment. Totals reflect the total amount of customer records, the total amount
                 of customer total records, and the total amount of payout history records.

Program   TIC100 – Customer File Conversion

```
01-28-1989                      001 FIRST NATIONAL BANK OF AMERICA                          PAGE     1

TIME INVESTMENT SYSTEM                CUSTOMER CONVERSION                                          08-904

CUST-NBR  CUSTOMER-PAYMENT        AMOUNT   DISP  PAY-DATE   SERIAL-NBR             APPL   TAX-AMT  CK

    511 CUSTOMER-PAYMENT        1,000.00    P   10-31-88        342                00      .00   P
        CUSTOMER-PAYMENT        1,000.00    P   11-30-88        343                00      .00   P
        CUSTOMER-PAYMENT        1,000.00    P   12-31-88        344                00      .00   P
        CUSTOMER-PAYMENT        1,000.00    P    1-31-89        345                00      .00   O

    615 CUSTOMER-PAYMENT          256.00    P    7-15-88     122321                08      .00   P
        CUSTOMER-PAYMENT          258.00    P    8-15-88     122321                08      .00   P
        CUSTOMER-PAYMENT          261.00    P    9-15-88     122321                08      .00   P
        CUSTOMER-PAYMENT          265.00    P   10-15-88     122321                08      .00   p
        CUSTOMER-PAYMENT          271.00    P   11-15-88     122321                08      .00   p
        CUSTOMER-PAYMENT          276.00    P   12-15-88     122321                08      .00   p
        CUSTOMER-PAYMENT          277.00    P    1-15-89     122321                08      .00   p

    712 CUSTOMER-PAYMENT        1,023.31    P    6-30-88        342                00      .00   P
        CUSTOMER-PAYMENT        1,023.31    P    9-30-88        343                00      .00   P
        CUSTOMER-PAYMENT        1,023.21    P   12-31-88        344                00      .00   P

TOTAL CUSTOMER RECORDS             3
TOTAL CUSTOMER TOTAL RECORDS       3
TOTAL PAYOUT HISTORY RECORDS      14
```

08-904 – Customer Conversion

Heading Descriptions

Cust-nbr   Customer Number. Number assigned to each customer.

Customer-payment Customer Payment. Description of the customer payment.

Amount   Amount. Amount of the customer payment.

Disp   Payment Disposition Code. Valid entries are:
                  P   Pay by check.
                  T   Transfer to another account.

Pay-date   Payment Date.

Serial-nbr   Serial Number. Check number if paid by check or the account number if
                  transferred.

Appl   Application Code. Code of the account if the payment was transferred to
                  another account.

Tax-amt   Tax Amount. Amount of tax withheld on the payment.

Ck   Check Disposition Code. Valid entries are:
                                    b   Payment not paid by check.
                                    O   Check outstanding.
                                    P   Check paid.

Totals   Totals. Total number of customer records, total number of customer total
                                records, and total number of payout history records.

08-905 – Master Conversion Input Edit

Purpose   This report shows the card images of all master conversion input entered to Time Investment on the report date. All cards entered are shown, or rejected cards only, depending on the option selected by the institution. The cards are edited for valid data to ensure that field entry requirements for the particular input forms are met. For rejected cards, the names of the fields in error are displayed, along with error codes and messages explaining the reject reasons. Error code explanations are listed at the beginning of the edit by form number. Card totals for the different types of conversion input are printed at the end of the report.

Program   TIC120 – Master Conversion Input Edit (controlled by MICM Record 0307 – option flag 3.)

```
   01-28-1989                           001 FIRST NATIONAL BANK OF AMERICA                                    PAGE    13

   TIME INVESTMENT SYSTEM                     MASTER CONVERSION INPUT EDIT                                     08-905

               FORM CARD  2    3       4       5       6       7       8
ACCOUNT-NUMBER  NBR  NBR  6789012345678901234567890123456789012345678901234567890    FIELD-NAME      ERROR-MESSAGE          ERR

   0000000411   20   00        0000     0000                           HNSONDA    2000            020                    001
                                                                                  2000            020                    217
                20 * 01  00001006OFFICR022C0000000500000011088   YEYYYY1NYYN9
                20 * 02  B12000S0M021089M00101P 000000000000CN0000000D00000P
                20 * 03  M01200S000000021089N000000000000N001000000000000040000
                20 * 04   1 N0010000000000000000N0000000000NI0000000511
                20 * 05  00000000    YNN000000000            0000025000
                20 * 06  N00100000000W 0000000000000000000000045503339NNN03
                20 * 07  000000000000000006771031650  99999999999N00100000000
                20   10  0000000000000000000000000000000000000000000000000000
                20   11  0000000000000000000000000000000000000000000000000000
                20   12  00000000000000000000000000600010000000000000000000000
                20   13  0000000000000000000000000000000000000000000000000000
                20   14  0000000000000000000000000000000000000000000000
                20   15  000000000000000000000000000000000
                20   16  0000000000000000000000000000000000000000000000000000
                20   17  0000000000000000000000000000000000000000000000000000
                20   18  0000000000000W0000000W0000000W0000000W0000000W0000000
                20   19  W0000000W0000000W0000000W0000000W0000000W0000000
                20   20  W00000000000000000000000032500000000000000123088013089
                20   21  00000000000000000000000000000000000000000
                20   22  00000000000000000000000000000000000000000005000000005000
                20   23  0000325000000032500000000001000001000000000000000000000500
                20   24  0000050000000032500000003250000000000000000000000000
                20   25  0000000000000000000000000000000000000000000000000000
                20   26  0000000000000000000000000000000000000000000000000000
                20   27  00000001108801108801108801108800000000000000 0000000000
                20   28  000000000000000000000000000000
------------------------------------------------------------------------------------------------------------------------
   0000000411   25   01  00000001000A0001123199UNSIGNED CHECK       HNSONDA
                25   02  WAITING FOR SIGNATURE                      HNSONDA
------------------------------------------------------------------------------------------------------------------------
   0000000411   30   01  JOHNSOAR0001                               HNSONDA    3001            030                    002
------------------------------------------------------------------------------------------------------------------------
   0000000411   31   01  103188P0000000050000000000033300000000000PI   HNSONDA
------------------------------------------------------------------------------------------------------------------------
   0000000411   31   01  113088P0000000050000000000033300000000000PI   HNSONDA
------------------------------------------------------------------------------------------------------------------------
   0000000411   31   01  123188P0000000050000000000033300000000000PI   HNSONDA
------------------------------------------------------------------------------------------------------------------------
   0000000411   32   01  123187123187090001 0000 00001
------------------------------------------------------------------------------------------------------------------------
```

08-905 – Master Conversion Input Edit (Details Page)

Heading Descriptions

Account-number   Account Number.

Form Nbr   Form Number. An asterisk (*) indicates that a field on that form/card has defaulted to a MICM value.

Card Nbr   Card Number.

(Card Data)   Card Positions 26 through 80. These 55 positions contain the remaining fields of the master conversion input.

Field-name   Field Name. Form and card in error.

Error-message   Error Message/Form Number. An asterisk (*) before the error code indicates a problem and must be corrected. If no asterisk is present, there is a minor error and no correction is necessary. Only the records without an asterisk are accepted by the system to be processed further.

Err   Error Code Number. Use this code and the form number under the error-message heading and refer to the error listing at the beginning of the report.

```
   01-28-1989                          001 FIRST NATIONAL BANK OF AMERICA                              PAGE    13

   TIME INVESTMENT SYSTEM                   MASTER CONVERSION INPUT EDIT                                08-905

   ** TOTALS **
                                 *------MASTER-INPUT-------*    *----ASSIGNMENT-INPUT-----*    *--RATE-CHANGE-HIST-INPUT-*
                   TOTAL-CARDS    NEW-ACCOUNTS                   ADDITIONS                      ADDITIONS
   GENERATED           12
   ENTERED            242              9                             1                              1
   REJECTED             0              0                             0                              0
   ACCEPTED           254              9                             1                              1
                                 *---AVAILABILITY-INPUT----*    *----RELATIONAL-INPUT-----*    *-INTEREST-PAY-HIST-INPUT-*
                                  ADDITIONS                      ADDITIONS                      ADDITIONS
   ENTERED                            2                             1                              3
   REJECTED                           0                             0                              0
   ACCEPTED                           2                             1                              3
```

08-905 – Master Conversion Input Edit (Totals Page)

Heading Descriptions

Totals   Totals by Institution. Various files are shown for conversion input. These include master input, assignment input, rate change history input, availability input, relational input, and interest pay history input. Under each heading is a total for new accounts, changes, additions and deletions.

Total-cards   Total Cards. Number of cards generated, entered, rejected, or accepted. These total card figures are shown on each type of file conversion input.

08-906 – Master File Conversion

Purpose   This report lists all of the accounts that are out of balance at the time of conversion. The report shows static account information, Master File balance information, and transaction information.

Program   TIC140 – Master File Conversion

```
   01-28-1989                      001 FIRST NATIONAL BANK OF AMERICA                          PAGE    1

   TIME INVESTMENT SYSTEM               MASTER FILE CONVERSION                                  08-906

ACCOUNT-NUMBER SHORT-NAME     BRANCH PRIM-CUST-KEY DATE-OPN CURRENT-BALANCE CALC-CUR-BALANCE  BEGIN-BALANCE   INT-PAID-YTD
                                                   LST-STMT   TOTAL-CREDITS TOTAL-CR-BALANCE  TOTAL-DEBITS TOTAL-DB-BALANCE

   0000000411      HNSONDA 00001        -0000  1-10-88         600.01          700.01            .00        325.00 ****
                                               1-09-88               6          700.01              0          .00 ****

   0000000412    JOHNSONDA 00001 JOHNSODA-0000  1-10-88         200.01          200.01            .00        325.00
                                               1-09-88               1          200.01              0          .00

   0000000413    JOHNSONDA 00001 JOHNSODA-0000  1-10-88       2,000.00             .00            .00        325.00 ****
                                               1-09-88               0             .00              0          .00 ****

   0000000414      HNSONDA 00001        -0000  1-10-88         600.01       190,020.00            .00        325.00 ****
                                               1-09-88              12       190,022.00              1         2.00 ****

   0000000415      HNSONDA 00001        -0000  1-10-88         600.01             .00            .00        325.00 ****
                                               1-09-88               1    1,212,002.00              1  1,212,002.00 ****

   0000000416      HNSONDA 00001        -0000 12-31-88         600.01    1,212,002.00            .00        325.00 ****
                                              12-30-88               1    1,212,002.00              0          .00 ****

   0000000417      HNSONDA 00001        -0000  3-28-88         600.01    1,214,002.00            .00        325.00 ****
                                               3-27-88               2    1,214,002.00              0          .00 ****

   0000000418      HNSONDA 00001        -0000  3-28-88  300,000,000.00             .00            .00        325.00 ****
                                               3-27-88               0             .00              0          .00 ****

   0000000419      HNSONDA 00001        -0000  3-28-88   12,340,000.00             .00            .00        325.00 ****
                                               3-27-88               0             .00              0          .00 ****
```

08-906 – Master File Conversion (Details Page)

Heading Descriptions

Account-number   Account Number.

Short-name   Customer's Short Name.

Branch   Branch Number.

Prim-cust-key   Primary Customer Key.

Date-opn   Date Open. Date the account opened.

Current-balance   Current Balance. Balance of the account as input to conversion.

Calc-cur-balance   Calculated Current Balance. The system takes the statement beginning balance, accumulates all debits and credits posted since the last statement date and calculates what the balance should be based on the items input. If the calculated balance does not match the current balance, 4 asterisks (****) appear to the right of the line.

Begin-balance   Beginning Balance. This is the balance of the account as of the last statement date.

Int-paid-YTD   Interest Paid Year-to-date.

Lst-stmt   Last Statement. Date of the last statement.

Total-credits   Total Credits. Total number of credits since the last statement date.

Total-cr-balance   Total Credit Balance. Total amount of credits since the last statement date.

Total-debits   Total Debits. Total number of debits since the last statement date.

Total-db-balance   Total Debit Balance. Total amount of debits since the last statement date.

```
   01-28-1989                      001 FIRST NATIONAL BANK OF AMERICA                             PAGE    2

   TIME INVESTMENT SYSTEM              MASTER FILE CONVERSION TOTALS                                 08-906
                       CALCULATED                        INTEREST    TOTAL                 TOTAL

BRANCH CURRENT-BALANCE  CURRENT-BALANCE BEGINNING-BALANCE    PAID-YTD   CREDITS   CREDIT-BALANCE   DEBITS    DEBIT-BALANCE


   312,345,200.06    2,616,924.02            .00     2,925.00        23   3,828,928.02        2    1,212,004.00
                     TOTAL ACCOUNTS          9    TOTAL ACCOUNTS OUT OF BALANCE        8
```

08-906 – Master File Conversion (Totals Page)

Heading Descriptions

Totals   Totals. Totals are shown for each institution, and each branch within the institution. Totals also include total accounts and total accounts out of balance.

08-907 – Miscellaneous Conversion

Purpose   This report lists all of the miscellaneous conversion information. This includes the Assignment Records, the Statement Copies Records, the Interest Payment History Records, and the Rate Change History Records. Totals in this report reflect how many of these records are being converted.

Program   TIC160 – Miscellaneous Conversion

```
   01-28-1989                         001 FIRST NATIONAL BANK OF AMERICA                                     PAGE     1

    TIME INVESTMENT SYSTEM                 MISCELLANEOUS CONVERSION                                          08-907

   ACCOUNT-NBR ASSIGNMENT              AMOUNT  TY  SEQ  EXP-DATE  DESCRIPTION-1                DESCRIPTION-2
               INTEREST-PAYMENT        AMOUNT      DISP PAY-DATE  SERIAL-NBR                       APPL    TAX-AMT  CK   TYPE
               RATE-CHANGE            CHG-DATE      SEQ EFF-DATE  OLD-RATE                     NEW-RATE  INTEREST-ENP  FLAG
               STMT COPY           CUSTOMER-KEY

   0000000411 ASSIGNMENT               10.00  A    1  12-31-99  UNSIGNED CHECK       HNSON                        HNSON
               STMT COPY       JOHNSO/A/R/0001
               INTEREST-PAYMENT        50.00       P  10-31-88     333                              00      .00   P    I
               INTEREST-PAYMENT        50.00       P  11-30-88     333                              00      .00   P    I
               INTEREST-PAYMENT        50.00       P  12-31-88     333                              00      .00   P    I
               RATE-CHANGE           12-31-87       1  12-31-87     9.000                        10.000

   0000000412 RATE-CHANGE            1-15-88        1   1-01-88     7.250                         6.750

   0000000413 RATE-CHANGE            2-09-88        1   2-09-88    12.000                        11.500

   0000000414 RATE-CHANGE           12-31-87        1  12-31-87     6.975                         7.500

   0000000415 RATE-CHANGE           12-31-88        1  12-31-88     8.000                         8.250

   0000000621 ASSIGNMENT              500.00  C    1  12-31-99  RETURNED CHECK       HNSON                        HNSON
               INTEREST-PAYMENT        23.00       P   9-15-88     333                              00      .00   P    I
               INTEREST-PAYMENT        23.00       P  10-15-88     333                              00      .00   P    I
               INTEREST-PAYMENT        23.00       P  11-15-88     333                              00      .00   P    I
               RATE-CHANGE           12-31-87       1  12-31-87     9.000                        10.000

   0000000415 ASSIGNMENT               73.00  A    1  12-31-99  UNSIGNED CHECK       HNSON                        HNSON
               STMT COPY       JOHNSO/A/R/0001
               INTEREST-PAYMENT        50.00       P  10-31-88     333                              00      .00   P    I
               INTEREST-PAYMENT        50.00       P  11-30-88     333                              00      .00   P    I
               INTEREST-PAYMENT        50.00       P  12-31-88     333                              00      .00   P    I
               RATE-CHANGE           12-31-87       1  12-31-87     9.000                        10.000

                   3 ASSIGNMENT RECORDS
                   9 INTEREST PAYMENT HISTORY RECORDS
                   8 RATE CHANGE HISTORY RECORDS
                   3 STATEMENT COPIES RECORDS
```

08-907 – Miscellaneous Conversion

Heading Descriptions

Account-nbr   Account Number.

Assignment   Assignment Record.

Amount   Assignment Amount.

Ty	Record Type. Valid entries are:
	A Assignment Record.
	C Caution record.

Seq   Sequence Number.

Exp-date   Expiration Date. Date the assignment or caution expires.

Description-1   Description One Field.

Description-2   Description Two Field.

Interest-payment   Interest Payment Record.

Amount   Interest Payment Amount.

Disp   Interest Payment Disposition. Valid entries are:

                                  C   Capitalize interest.
                                  P   Pay interest by check.
                                  T   Transfer to another account.

Pay-date   Next Payment Date.

Serial-nbr   Serial Number. May be zeros, a check number if the Interest Disposition is 'P' for pay by check, or an account number if the interest disposition is 'T' for transfer.

Appl   Application Code. Code for the account if the interest was transferred to another account.

Tax-amt   Tax Amount. Amount of tax withheld from the interest payment.

Ck   Check Disposition Code. Valid entries are:

                                    b̶   Interest not paid by check.
                                  O   Check outstanding.
                                  P   Check paid.

Type   Check Type. Valid entries are:

                                    I   Interest check.
                                  P   Principal check.

Rate-change   Rate Change History Record.

Chg-date   Rate Change Date.

Seq   Sequence Number.

Eff-date   Effective Date. Rate change effective date.

Old-rate	Old Interest Rate.
New-rate	New Interest Rate.
Interest-enp	Not used.
Flag	Not used.
Stmt Copy	Statement Copies Record. Used to send copies of a statement to a maximum of 16 different addresses.
Customer-key	Customer Key.
Totals	Totals by Institution. Also included are the total amounts of the converted records, which include the assignment records, the interest payment history records, the rate change history records, and the statement copies records.

08-909 – Total File Conversion

Purpose   This report shows the total file conversion information. Totals are shown by type, within branch, within institution.

Program   TIC200 – Total File Conversion

```
   01-28-1989                     001 FIRST NATIONAL BANK OF AMERICA                           PAGE    1

   TIME INVESTMENT SYSTEM  - CD        TOTAL FILE CONVERSION                                    08-909

   BNK BRNCH TYP FIELD NAME                                  AMOUNT                 COUNT

   001 00001 006 CURRENT BALANCE                     312,344,600.05                     8
                 DORMANT ACCOUNT BALANCE                        .00                     0
                 EMPLOYEE ACCOUNT TOTAL            312,342,400.04                     6
                 CORRESPONDENT BANK TOTAL         312,342,400.04                     6
                 PUBLIC FUNDS TOTAL               312,342,400.04                     6
                 TRUST DEPOSIT TOTAL              312,342,400.04                     6
                 SECURED DEPOSIT TOTAL            312,342,400.04                     6
                 COLLATERAL TOTAL                 312,342,400.04                     6
                 MATURED CERTIFICATE TOTAL              1,200.02                     2
                 CHECKS OUTSTANDING TOTAL                       .00                    0
                 BALANCES OVER 100,000.00         312,340,000.00                     2
                 TAX EXEMPT TOTAL                              .00                    0
                 TRANSFERABLE CERTIFICATE TOTAL                .00                    0
                 INTEREST EARNED NOT PAID                     8.00
                 INTEREST PAID MONTH TO DATE                   .00
                 INTEREST PAID YEAR TO DATE               2,600.00
                 SERVICE CHARGES PAID MONTH TO DATE            .00
                 SERVICE CHARGES PAID YEAR TO DATE             .00
                 INTEREST EARNED MONTH TO DATE                 .00
                 INTEREST EARNED YEAR TO DATE             2,608.00
                 INTEREST PENALTY MONTH TO DATE                .00
                 INTEREST PENALTY YEAR TO DATE            2,600.00
                 FEDERAL WITHHOLDING YEAR TO DATE       141,050.20
                 DISBURSEMENT TAX WITHHOLDING YEAR TO DATE    5,000.00
```

08-909 – Total File Conversion

Heading Descriptions

Bnk   Institution Number.

Brnch   Branch Number.

Typ   Account Type.

Field Name   Field Name. Descriptions of the fields that were converted. The following are included:

                       Current balance
                       Dormant account balance
                       Employee account total
                       Correspondent institution total
                       Public funds total
                       Trust deposit total
                       Secured deposit total

Collateral total
Matured certificate total
Checks outstanding total
Balances over 100,000.00
Tax-exempt total
Transferable certificate total
Interest earned not paid
Interest paid month-to-date
Interest paid year-to-date
Service charges paid month-to-date
Service charges paid year-to-date
Interest earned month-to-date
Interest earned year-to-date
Interest penalty month-to-date
Interest penalty year-to-date
Federal withholding year-to-date
Disbursement tax withholding year-to-date

Amount   Amount. Total amount for each field.

Count   Count. Total number of accounts in each field.

08-910 – TDOA Deposit Verification

Purpose   This report shows all Availability Records associated with a Time Deposit Open
                       Account if the sum of those records does not balance to the account's current
                       balance, interest ENP, or interest available.

Program   TIC190 – TDOA Deposit Verification

```
   02-27-1986                      001 FIRST NATIONAL BANK OF AMERICA                             PAGE    2

   TIME INVESTMENT SYSTEM               TDOA DEPOSIT VERIFICATION                                 08-910

 BANK  BRANCH  TYPE  ACCOUNT     DEP BALANCE    ACCT BALANCE     DEP INT ENP    ACCT INT ENP   DEP INT AVAIL  ACCT INT AVAIL

  001   00001   794  0001406745      1447.21        1487.21            .78             .78           .19           1.19
  001   00099   791  0009700218     10513.15       10598.17         130.26          130.26        531.87         531.87
  001   00099   791  0009700226      4690.43        4753.73          58.12           58.12        217.80         217.80
  001   00099   791  0009700234      4690.43        4753.73          58.12           58.12        217.80         217.80
  001   00099   791  0009700242      3053.36        3106.34          37.83           37.83        130.70         130.70
  001   00099   791  0009700250      9322.80        9486.82         115.51          115.51        346.43         346.43
  001   00099   791  0009700269      6932.95        7083.63          85.90           85.90        261.19         261.19
  001   00099   791  0009700382      3402.52        3542.54          42.16           42.16         72.29          72.29
  001   00099   791  0009700392      4087.65        4244.20          50.65           50.65         94.38          94.38
  001   00099   791  0009700404      1870.01        1943.31          23.16           23.16         41.60          41.60
  001   00099   791  0009700412      5593.67        5831.27          69.31           69.31        122.03         122.03
  001   00099   791  0009700420      3604.88        3743.35          44.66           44.66         79.36          79.36
  001   00099   791  0009700439      2268.65        2365.72          28.11           28.11         48.08          48.08
  001   00099   791  0009700447      3846.69        4005.25          47.66           47.66         78.24          78.24
  001   00099   791  0009700455      2390.66        2487.73          29.62           29.62         48.60          48.60
  001   00099   791  0009700463      1398.45        1456.09          17.32           17.32         28.45          28.45
  001   00099   791  0009700501      6783.46        7070.74          84.05           84.05        130.76         130.76
  001   00099   791  0009700528      5724.11        5966.53          70.92           70.92        110.34         110.34
  001   00099   791  0009700536      4801.23        5005.65          59.48           59.48         91.53          91.53
  002   00099   791  0009700544      6735.54        7022.67          83.45           83.45        121.08         121.08
  002   00099   791  0009700552      6735.54        7022.67          83.45           83.45        121.08         121.08
  002   00099   791  0009700595     11067.78       11536.88         137.12          137.12        198.92         198.92
  002   00099   791  0009700609       828.55         863.27          10.26           10.26         14.89          14.89
  002   00099   791  0009700676      1583.06        1649.47          19.62           19.62         26.03          26.03
  002   00099   791  0009700684      3780.90        3948.97          46.85           46.85         62.31          62.31
  002   00099   791  0009700692      1887.96        1960.23          23.39           23.39         30.93          30.93
  002   00099   791  0009700706      3780.90        3948.97          46.85           46.85         62.31          62.31
  002   00099   791  0009700722      2367.76        2433.91          29.34           29.34         77.76          77.76
  002   00099   791  0009700730      2367.76        2433.91          29.34           29.34         77.76          77.76
  002   00099   791  0009700749      4540.96        4670.78          56.26           56.26        146.35         146.35
  002   00099   791  0009700773      6583.65        6781.92          81.57           81.57        195.74         195.74
  002   00099   791  0009701060        57.74            .00            .01-            .01-         57.74          57.74
```

08-910 – TDOA Deposit Verification

Heading Descriptions

Institution   Institution Number.

Branch   Branch Number.

Type   Account Type.

Account   Account Number.

Dep Balance   Deposit Balance. Total amount in all availability records.

Acc Balance   Account Balance.

Dep Intenp   Interest Earned Not Paid. Total amount of interest earned not paid in all
                       availability records.

Acc Intenp   Account Interest Earned Not Paid. Amount of interest earned not paid in the
                       account.

Dep Intavail   Interest Available. Total amount of capitalized interest available in all
                       availability records.

Acc Intavail   Account Interest Available. Amount of capitalized interest available in the
                       account.

08-911 – Employer Conversion Input Edit

Purpose   This report lists Time Investment Employer Records being converted. The card image of the input is shown on the report. The option to print all output or rejected cards only is available on the control card for TIC105 (Employer Conversion Input Edit). The cards are edited for valid dates to ensure that field entry requirements for that particular input form are met. For rejected cards, the field number in error is displayed, along with an error code. Error code and field number explanations are listed at the beginning of the report by form number. Card totals for the input are printed at the end of the report.

Program   TIC105 – Employer Conversion Input Edit

```
     01-28-1989                          001 FIRST NATIONAL BANK OF AMERICA                                    PAGE    2

     TIME INVESTMENT SYSTEM                   EMPLOYER CONVERSION INPUT EDIT                                   08-911

                      FORM CARD 2  3       4        5        6        7        8
     EMPLOYER-NUMBER  NBR  NBR  678901234567890123456789012345678901234567890   FIELD-NAME       ERROR-MESSAGE        ERR

        0000006771    17   00       0000     0000            EMPL SHORT NAME   1700             017                  001
                                                                              1700             017                  004
                      17   01  000010FFICER011020880000     987654321
     ----------------------------------------------------------------------------------------------------------------
        0000006772    17   00       0000     0000            ADMIN   ANTHONY  1700             017                  001
                                                                              1700             017                  004
                      17   01  000010FFICER011020880000     123456789
     ----------------------------------------------------------------------------------------------------------------
        0000006773    17   00       0000     0000            FIRST STATE BK   1700             017                  001
     1700             017                  004
                      17   01  000010FFICER011020880000     983723000
     ----------------------------------------------------------------------------------------------------------------
        0000006774    17   00       0000     0000            THIRD NATIONAL   1700             017                  001
                                                                              1700             017                  004
                      17   01  000010FFICER011020880000     974100001
     ----------------------------------------------------------------------------------------------------------------
        0000123471    17   00       0000     0000            EMPL SHORT NAME  1700             017                  001
                                                                              1700             017                  004
                      17   01  000010FFICER011020880000     888432121
     ----------------------------------------------------------------------------------------------------------------
        0000134541    17   00       0000     0000            EMPL SHORT NAME  1700             017                  001
                                                                              1700             017                  004
                      17   01  000010FFICER011020880000     432454321
     ----------------------------------------------------------------------------------------------------------------
        0000134771    17   00       0000     0000            EMPL SHORT NAME  1700             017                  001
                                                                              1700             017                  004
                      17   01  000010FFICER011020880000     543333321
     ----------------------------------------------------------------------------------------------------------------
```

08-911 – Employer Conversion Input Edit (Details Page)

Heading Descriptions

Employer-number   Employer Number. Employer's assigned identification number.

Form Nbr   Form Number.

Card Nbr   Card Number.

(Card Data)	Card Positions 26 through 80. These 55 positions contain the remaining fields of the master conversion input.
Field-name	Field Name. Form and card in error.
Error-message	Form Number. An asterisk (*) before the error code indicates a problem that must be corrected. If no asterisk is present, there is a minor error and no correction is necessary. Only the records without an asterisk are accepted by the system to be processed further.
Err	Error Code Number. Use this code with the field and form numbers, and refer to the error message list at the beginning of the report to determine the error.

```
   01-28-1989                      001 FIRST NATIONAL BANK OF AMERICA                         PAGE    2

   TIME INVESTMENT SYSTEM              EMPLOYER CONVERSION INPUT EDIT                          08-911

                                                                                                 3

                                                                                                 1

   ** TOTALS **
                                  *-----EMPLOYER-INPUT------*
                   TOTAL-CARDS    NEW-EMPLOYERS
   GENERATED            0
   ENTERED             14              7                          0
   DUPLICATE            0
   REJECTED             0              0                          0
   ACCEPTED            14              7                          0
```

08-911 – Employer Conversion Input Edit (Totals Page)

Heading Descriptions

Total Cards	Total Cards. Number of cards input, generated, rejected, accepted, number of duplicate cards.
New-employers	Total New Employers' Records.

08-912 – Employer Conversion

Purpose   This report lists the total number of employer records that were added to the
                           Employer File.

Program   TIC110 – Employer File Conversion

```
    01-28-1989                    001 FIRST NATIONAL BANK OF AMERICA                    PAGE    1

    TIME INVESTMENT                    EMPLOYER CONVERSION                                08-912

    TOTAL EMPLOYER RECORDS             1
```

08-912 – Employer Conversion

Heading Descriptions

Total Employer Records   Total Employer Records.

Files

See the Application Files chapter of *Reference Guide 2* for additional files used in the conversion (and daily processing) of Time Investment. Use the following files for *conversion processing only*.

TI-CRDCFIL – Conversion Control Card File

The Conversion Control Card File contains the control cards that are used in programs TIC100 (Customer File Conversion), TIC140 (Master File Conversion), and TIC160 (Miscellaneous Conversion).

File Statistics

File Type Card
Access Method Sequential
External Name TICRDC

Record Name	Library Name	Record Length
TICRDC-RECORD	None	0080 Bytes

TICRDC-RECORD – Conversion Control Card Record

The Card Record is used by various programs as a method of indicating input and output formats. Format of TICRDC-RECORD varies depending on the program being run.

TI-CRDIFIL – Conversion Input Card File

The Conversion Input Card File can be on cards, disk, or tape. This file contains user-generated input and is used by programs TIC040 (Transaction Conversion Edit and Sort), TIC060 (Conversion Sort), TIC080 (Customer Conversion Input Edit), and TIC120 (Master Conversion Input Edit). The card file also contains the control card necessary in each of these programs.

File Statistics

File Type	Card
Access Method	Sequential
External Name	TICRDI

Record Name	Library Name	Record Length
TICRDI-RECORD	None	0080 Bytes

TICRDI-RECORD – Conversion Input Card Record

The Card Record is used by various programs as a method of indicating input and output formats. Format of TICRDI-RECORD varies depending on the program being run.

TI-DSKCFIL – Conversion Transaction Disk File

The Conversion Transaction Disk File can be on cards, disk, or tape. This file contains user-generated input. Information for this file is entered through the conversion transaction input only. The Conversion Transaction File is used by program TIC040 (Transaction Conversion Edit and Sort) for the Transaction File conversion.

File Statistics

File Type   Disk
Access Method   Sequential
External Name   TIDSKC

Record Name	Library Name	Record Length
TIDSKC-RECORD	TISFM20	0080 Bytes

TIDSKC-RECORD – Conversion Transaction Disk Record

This record is identical to TIFM20-RECORD. Refer to the description of TI-CRDOFIL in the Application Files chapter of *Reference Guide 2* for a description of this record.

TI-DSKIFIL – Conversion Input Disk File

The Conversion Input Disk File can be on cards, disk, or tape. This file is input and sorted by TIC060 (Conversion Sort), from which the Sorted Conversion Output File is created.

File Statistics

File Type	Disk
Access Method	Sequential
External Name	TIDSKI

Record Name	**Library Name**	**Record Length**
TIDSKI-RECORD	TISFM20	0080 Bytes

TIDSKI-RECORD – Conversion Input Disk Record

This record is identical to TIFM20-RECORD. Refer to the description of TI-CRDOFIL in the Application Files chapter of *Reference Guide 2* for a description of this record.

TI-DSKOFIL – Customer Conversion Input Disk File

The Customer Conversion Input Disk File can be on disk or tape. This file is created in TIC060 (Conversion Sort) and edited by TIC080 (Customer Conversion Input Edit) and TIC120 (Master Conversion Input Edit).

File Statistics

File Type	Disk
Access Method	Sequential
External Name	TIDSKO

Record Name	Library Name	Record Length
TIDSKO-RECORD	TISFM20	0080 Bytes

TIDSKO-RECORD – Customer Conversion Input Disk Record

This record is identical to TIFM20-RECORD. Refer to the description of TI-CRDOFIL in the Application Files chapter of *Reference Guide 2* for a description of this record.

TI-EDCDFIL – Edited Customer Conversion Disk File

The Edited Customer Conversion Disk File can be disk or tape. This file is created in TIC080 (Customer Conversion Input Edit) and is used as input in TIC100 (Customer File Conversion) to create the Customer File.

File Statistics

File Type   Disk
Access Method Sequential
External Name TIEDCD

Record Name	Library Name	Record Length
TIEDCD-RECORD	TISFM20	0080 Bytes

TIEDCD-RECORD – Edited Customer Conversion Disk Record

This record is identical to TIFM20-RECORD. Refer to the description of TI-CRDOFIL in the Application Files chapter of *Reference Guide 2* for a description of this record.

TI-EDCTFIL – Edited Customer Conversion Tape File

The Edited Customer Conversion Tape File can be on disk or tape. This file is created in TIC080 (Customer Conversion Input Edit) and is used as input in TIC100 (Customer File Conversion) to create the Customer File.

File Statistics

File Type	Tape
Access Method	Sequential
External Name	TIEDCT

Record Name	Library Name	Record Length
TIEDCT-RECORD	TISFM20	0080 Bytes

TIEDCT-RECORD – Edited Customer Conversion Tape Record

This record is identical to TIFM20-RECORD. Refer to the description of TI-CRDOFIL in the Application Files chapter of *Reference Guide 2* for a description of this record.

TI-EDMDFIL – Edited Conversion Master Disk File

The Edited Conversion Master Disk File can be on disk or tape. This file is created by TIC120 (Master Conversion Input Edit). The Edited Conversion Master Disk File, along with the Edited Transaction File created in TIC040 (Transaction Conversion Edit and Sort), is used as input to TIC140 (Master File Conversion), for the Master File Conversion. It is also used as input to TIC160 (Miscellaneous Conversion).

File Statistics

File Type	Disk
Access Method	Sequential
External Name	TIEDMD

Record Name	**Library Name**	**Record Length**
TIEDMD-RECORD	TISFM20	0080 Bytes

TIEDMD-RECORD – Edited Conversion Master Disk Record

This record is identical to TIFM20-RECORD. Refer to the description of TI-CRDOFIL in the Application Files chapter of *Reference Guide 2* for a description of this record.

TI-EDMTFIL – Edited Conversion Master Tape File

The Edited Conversion Master Tape File can be on disk or tape. This file is created by TIC120 (Master Conversion Input Edit). The edited Master Conversion File, along with the Edited Transaction File created in TIC040 (Transaction Conversion Edit and Sort), is used as input to TIC140 (Miscellaneous Conversion), for the Master File Conversion. It is also used as input to TIC160 (Miscellaneous Conversion).

File Statistics

File Type   Tape
Access Method   Sequential
External Name   TIEDMT

Record Name	**Library Name**	**Record Length**
TIEDMT-RECORD	TISFM20	0080 Bytes

TIEDMT-RECORD – Edited Conversion Master Tape Record

This record is identical to TIFM20-RECORD. Refer to the description of TI-CRDOFIL in the Application Files chapter of *Reference Guide 2* for a description of this record.

TI-TAPCFIL – Conversion Transaction Tape File

The Conversion Transaction Tape File can be on cards, disk, or tape. This file contains user-generated input. Information for this file is entered through conversion transaction input only. The conversion transaction file is used by TIC040 (Transaction Conversion Edit and Sort) for the Transaction File conversion.

File Statistics

File Type   Tape
Access Method   Sequential
External Name   TITAPC

Record Name	Library Name	Record Length
TITAPC-RECORD	TISFM20	0080 Bytes

TITAPC-RECORD – Conversion Transaction Tape Record

This record is identical to TIFM20-RECORD. Refer to the description of that record for additional information.

TI-TAPIFIL – Conversion Input Tape File

The Conversion Input Tape File can be on cards, disk, or tape. This file is sorted by TIC060 (Conversion Sort) from which the sorted Conversion Output File is created.

File Statistics

File Type	Tape
Access Method	Sequential
External Name	TITAPI

Record Name	**Library Name**	**Record Length**
TITAPI-RECORD	TISFM20	0080 Bytes

TITAPI-RECORD – Conversion Input Tape Record

This record is identical to TIFM20-RECORD. Refer to the description of that record for additional information.

TI-TAPOFIL – Customer Conversion Output Tape File

The Customer Conversion Output Tape File can be on disk or tape. This file is created in TIC060 (Conversion Sort) and edited by TIC080 (Customer Conversion Input Edit) and TIC120 (Master Conversion Input Edit).

File Statistics

File Type	Tape
Access Method	Sequential
External Name	TITAPO

Record Name	Library Name	Record Length
TITAPO-RECORD	TISFM20	0080 Bytes

TITAPO-RECORD – Customer Conversion Output Tape Record

This record is identical to TIFM20-RECORD. Refer to the description of that record for additional information.

TI-TRNDFIL – Edited Conversion Transaction Disk File

The Edited Conversion Transaction Disk File is created by TIC040 (Transaction Conversion Edit and Sort), using the conversion Transaction File. The edited conversion transaction file is used by TIC140 (Master File Conversion) to convert the Time Investment Master File and Transaction History.

File Statistics

File Type	Disk
Access Method	Sequential
External Name	TITRND

Record Name	Library Name	Record Length
TITRND-RECORD	TISFM20	0080 Bytes

TITRND-RECORD – Edited Conversion Transaction Disk Record

This record is identical to TIFM20-RECORD. Refer to the description of that record for additional information.

TI-TRDCFIL – Conversion Transaction Description File

The Conversion Transaction Description File is created by one of the following programs, depending on the Time Investment release at your site or if your institution is converting from an existing application.

- TIC140 – Master File Conversion
- TIX820 – Time Investment 8.1 to 8.2 Conversion
- TIX821 – Time Investment 8.0 to 8.2 Conversion

File Statistics

File Type	Disk
Access Method	Sequential
External Name	TITRDC

Record Name	**Library Name**	**Record Length**
TITRDC-RECORD	TISTRDC	Variable

TITRDC-RECORD – Conversion Transaction Description Record

The following record description shows the format for the Conversion Transaction Description Record.

Field Name	Level	Mode	Picture	Displacement	
TITRDC-RECORD Conversion Transaction Description Record.	01	R		1	V
TITRDC-ORGX Organization ID.	03	C	X(06)	1	6
TITRDC-REC-CODE Record Code. First three characters of the record ID.	03	C	X(03)	7	9
TITRDC-BIN-ID Binary ID. Not used for load format.	03	N	S9(04)	10	11
TITRDC-PHY-KEY-LEN Key Length. Length of the primary record key.	03	N	S9(04)	12	13
TITRDC-PHY-REC-LEN Record Length. Record length (including key).	03	N	S9(04)	14	15
TITRDC-REC-AREA Record Area. Record image area.	03	G		16	V

Field Name	Level	Mode	Picture	Displacement
TITRDC-REC-AREA-R	05	C	X(01)	16 V

OCCURS 1 TO 2000 TIMES DEPENDING ON TITRNC-PHY-REC-LEN. The actual record. Copybook TTITRN is used to format this image area. The length of the record depends on TITRNC-PHY-REC-LEN. Refer to *Reference Guide 2* for a detailed description of the API TRN Record.

TI-TRNTFIL – Edited Conversion Transaction Tape File

The Edited Conversion Transaction Tape File is created by TIC040 (Transaction Conversion Edit and Sort) using the conversion Transaction File. The edited conversion Transaction File is used by TIC140 (Master File Conversion) to convert the Time Investment Master File and transaction history.

File Statistics

File Type	Tape
Access Method	Sequential
External Name	TITRNT

Record Name	**Library Name**	**Record Length**
TITRNT-RECORD	TISTRNT	0080 Bytes

TITRNT-RECORD – Edited Conversion Transaction Tape Record

This record is identical to TIFM20-RECORD. Refer to the description of that record for additional information.

This chapter lists the processing steps for migrating from your current release of Infopoint Time Investment to Time Investment 8.3. In addition, this chapter contains the documentation for programs and reports associated with migration.

Note: Before beginning the migration process, you must complete all of the steps in the Installation Processing chapter of this guide.

Migration Processing

This section lists the processing steps for migrating to more current release of Infopoint Time Investment. Steps are provided to assist you in migrating from:

- Time Investment 8.1 to Time Investment 8.3
- Time Investment 8.2 to Time Investment 8.3
- Time Investment 8.3.1 to Time Investment 8.3.2
- Time Investment 8.3.4 to Time Investment 8.3.5

Migrating from 8.1 to 8.3

This section lists the steps involved in preparing for migration from Time Investment 8.1 to Time Investment 8.3.

Step 1 | **Run MID800 to back up your existing MICM files**.

Step 2 | **Run TIX500 (MICM 8.2 Conversion)**.

Note: This step is required only if you are running MICM 5.0.

This program converts necessary MICM parameters to the new MICM 5.0 record. The converted record is MICM Record 2013 (Transaction Code Parameters) converted from MICM Record 0326.

TIX500 reads MIMAST and converts Record 0326 to Record 2013 for application 08 and 98. A control card allows you to create Record 2013 without deleting Record 0326. It is recommended that you create Record 2013 first and then delete Record 0326 in a separate run *after* you have determined that your migration is successful and you no longer need those records. One control card per institution is needed.

Step 3 | **Run TIX510 (MICM 8.3 Conversion)**.

This program migrates the necessary MICM parameters to the new format used by Time Investment 8.3. Affected records are:

- 3500 – Time Investment Institution Parameters Record
- 3501 – Time Investment Type Defaults Record
- 3502 – Time Investment Type Processing Parameters Record
- 3503 – Time Investment Penalty Routines Record
- 3504 – Time Investment Interest Rate Tables Record
- 3507 – Time Investment Service Charge Parameters Record

Step 4 | **Establish API Files (VSAM environment only)**.

Run TIVSMDEF to define and initialize the Time Investment VSAM API files *or* run TIVSMLD to define and initialize the Time Investment VSAM API files to allow for load processing.

Step 5   Run TIX820 (File Conversion).

This program migrates the Time Investment 8.1 files into their revised 8.3 format.

Step 6a   Run TIR360 (Pointer/Account Numbers Record Verification).

This program produces a list of discrepancies between the customer pointers and the Total Record – Number.

Run TIR380 (Rebuild Account Number Record).

This program rebuilds the Account Number Records.

Step 7   Run TIX020 (Reorg Balance Migration).

This program initializes the new Reorg Balance field for records on the Master File.

Step 8   Run TIVSMBKP (File Backup).

This JCL executes a Runtime Components utility program that backs up the Time Investment 8.3 records. Other utility programs may be used instead of this one.

Migrating from 8.2 to 8.3

Process the following programs and information in the order listed.

Step 1   Run MID800 to back up your existing MICM files.

Step 2   Run TIX510 (MICM 8.3 Conversion).

This program migrates the necessary MICM parameters to the new format used by Time Investment 8.3. Affected records are:

- 3500 – Time Investment Institution Parameters Record
- 3501 – Time Investment Type Defaults Record
- 3502 – Time Investment Type Processing Parameters Record
- 3503 – Time Investment Penalty Routines Record
- 3504 – Time Investment Interest Rate Tables Record
- 3507 – Time Investment Service Charge Parameters Record

Step 3   Run TIX520 (MICM 8.3.1 Conversion).

This program initializes the new amount code to a space on MICM Record 3504 (Time Investment Interest Rate Tables).

Step 4   Establish API Files (VSAM environment only).

Run TIVSMDEF to define and initialize the Time Investment VSAM API files *or* run TIVSMLD to define and initialize the Time Investment VSAM API files to allow for load processing.

Step 5   **Run TIX010 (File Conversion)**.

This program migrates the Time Investment 8.2 files into their revised 8.3 format.

Step 6   **Run TIX020 (Reorg Balance Migration)**.

This program initializes the new Reorg Balance field for the records on the Master File.

Step 7   **Run TIVSMBKP (File Backup)**.

This JCL executes a Runtime Components utility program that backs up the Time Investment 8.3 records. Other utility backups may be used instead of this one.

Migrating from 8.3.1 to 8.3.2

Process the following programs and information in the order listed.

Step 1   **Run TIX030 (Time Investment 8.3.1 to 8.3.2 Migration)**.

This program initializes the API records in the 8.3.2 format.

Step 2   **Run TIVSMBKUP (File Backup)**.

This JCL executes a Runtime Components utility program that backs up the Time Investment 8.3 records. Other utility backups may be used instead of this one.

Step 3   **Run MID800 to backup your existing MICM files**.

Step 4   **Run TIX520 (MICM 8.3.1 Conversion)**.

This program initializes the new amount code to a space on MICM Record 3504 (Time Investment Interest Rate Tables).

Migrating from 8.3.4 to 8.3.5

Process the following programs and information in the order listed.

Step 1   **Run TIX040 (Time Investment 8.3.4 to 8.3.5 Migration)**.

This program initializes the API records in the 8.3.5 format.

Step 2   **Run TIVSMBKUP (File Backup)**.

This JCL executes a Runtime Components utility program that backs up the Time Investment 8.3 records. Other utility backups may be used instead of this one.

Programs

TIX010 – Time Investment 8.2 to 8.3.2 Migration

This program is used to convert the Time Investment 8.2 API records to the 8.3.2 version.

Note: Be sure to back up the 8.2 API records using program BIS861B from Runtime Components. In addition, reassemble the API control tables using the Time Investment 8.3 definitions before executing this program.

API MICM Records   None

API Application
Records

Ext Record Code	Name	Description
ACN	TIACN-RECORD	Account Numbers Record
ASG	TIASG-RECORD	Assignment/Caution Record
AVL	TIAVL-RECORD	TDOA Availability Record
BNK	TIBNK-RECORD	Institution Control Record
CST	TICST-RECORD	Customer Record
EMN	TIEMN-RECORD	Employer Account Numbers Record
EMP	TIEMP-RECORD	Employer Record
INT	TIINT-RECORD	Interest Payment History Record
IRA	TIIRA-RECORD	IRA/Keogh Record
LOG	TILOG-RECORD	Log Record
MST	TIMST-RECORD	Account Master Record
PAY	TIPAY-RECORD	Customer Payout History Record
RAT	TIRAT-RECORD	Rate Change History Record
TA1	TITA1-RECORD	Total Record – Amount
TA2	TITA2-RECORD	Total Record – Number
TRD	TITRD-RECORD	Transaction Description Record
TRN	TITRN-RECORD	Transaction History Record
XRL	TIXRL-RECORD	Statement Copies Record

Files

Name	Description	Opened	Media	Access Mode	Record Length
BIPUTIL	Backup Utility	Input	Tape	Sequential	Variable
PRNTER	Print File	Output	Printer	Sequential	133

Reports   Loaded Records by Record Type (from Runtime Components)

Control Card   The control card is required.

Columns	Size	Description
01 – 04	4	Application ID. Valid entry is **IPTI**.
05 – 05	1	Blank.
06 – 08	3	API external record code. Valid entry is **BNK**.
09 – 09	1	Blank.
10 – 17	8	User ID. Valid entry is **INFOPNT**.
18 – 18	1	Blank.
19 – 20	2	Language Code. Valid entry is **EN**.
21 – 30	10	Blank.
31 – 31	1	Trace switch. Valid entries are: **0** No trace. **1** Trace.
32 – 34	3	Blank.
35 – 35	1	Media switch. Valid entries are: **0** Disk. **1** Tape (VSE only). **Note:** BITAPE label is required.
36 – 80	45	Not used. Must be blanks.

Abort Information   If the program detects a processing irregularity, it displays an abort code on the operator's console and the printer.

Code	Description
0001	No control card was loaded.
0002	Application ID on the control card is invalid.
0003	API external record code on the control card is invalid.
0004	User ID on the control card is invalid.

Code	Description
0005	Trace switch on the control card is invalid.
0006	Media switch on the control card is invalid.
0007	OPEN failed on BIPRPT.
0008	OPEN failed on TP4.
0009	CLOSE failed on TP4.
0010	CLOSE failed on BIPRPT.
0011	READ failed on TP4.
0012	CALL failed on BISDBS.
0017	LOCK failed on BISDBS.
0018	WRITE failed on TP4.
0019	Invalid return code for BICRINFO.
0020	Record not available.
0021	Record is not defined as VSAM.
0022	BIPMSG-STAT is not equal to '00'.
0023	BIPDAT-STAT is not equal to '00'.
0024	GLOBAL CLOSE failed on BISDBS.
0025	GLOBAL COMMIT failed on BISDBS.

TIX020 – Time Investment 8.3 Re-organization Balance Migration

This program is used to re-organize balance file migration for the 8.3 version of Time Investment.

Note: Be sure to back up the 8.3 Account Master Record using program BIS861B from Runtime Components.

API MICM Records   None

API Application Records

Ext Record Code	Name	Description
AVL	TIAVL-RECORD	TDOA Availability Record
MST	TIMST-RECORD	Account Master Record
TRN	TITRN-RECORD	Transaction History Record

Files   None

Reports   Loaded Records by Record Type (from Runtime Components)

Control Card   None

Abort Information   If the program detects a processing irregularity, it displays an abort code on the operator's console and the printer.

Code	Description
0001	OPEN failed on MST.
0002	No MST input found.
0003	READ failed on TRN.
0004	READ failed on AVL
0005	WRITE failed on MST.

TIX030 – Time Investment 8.3.1 to 8.3.2 Migration

This program is used to migrate from Time Investment version 8.3.1 to the 8.3.2 version.

Note: Be sure to back up the 8.3.1 API records using program BIS861B from Runtime Components.

The record sizes have not changed; however, a reserved field was reformatted to add additional fields for the TIRENEW transaction.

API MICM Records   None

API Application
Records

Ext Record Code	Name	Description
ACN	TIACN-RECORD	Account Numbers Record
ASG	TIASG-RECORD	Assignment/Caution Record
AVL	TIAVL-RECORD	TDOA Availability Record
BNK	TIBNK-RECORD	Institution Control Record
CST	TICST-RECORD	Customer Record
EMN	TIEMN-RECORD	Employer Account Numbers Record
EMP	TIEMP-RECORD	Employer Record
INT	TIINT-RECORD	Interest Payment History Record
IRA	TIIRA-RECORD	IRA/Keogh Record
LOG	TILOG-RECORD	Log Record
MST	TIMST-RECORD	Account Master Record
PAY	TIPAY-RECORD	Customer Payout History Record
RAT	TIRAT-RECORD	Rate Change History Record
TA1	TITA1-RECORD	Total Record – Amount
TA2	TITA2-RECORD	Total Record – Number
TRD	TITRD-RECORD	Transaction Description Record
TRN	TITRN-RECORD	Transaction History Record
XRL	TIXRL-RECORD	Statement Copies Record

Files

Name	Description	Opened	Media	Access Mode	Record Length
BIPUTIL	Backup Utility	Input	Tape	Sequential	Variable
PRNTER	Print File	Output	Printer	Sequential	133

Reports   Loaded Records by Record Type (from Runtime Components)

Control Card   The control card is required.

Columns	Size	Description
01 – 04	4	Application ID. Valid entry is **IPTI**.
05 – 05	1	Blank.
06 – 08	3	API external record code. Valid entry is **BNK**.
09 – 09	1	Blank.
10 – 17	8	User ID. Valid entry is **INFOPNT**.
18 – 18	1	Blank.
19 – 20	2	Language code. Valid entry is **EN**.
21 – 30	10	Blank.
31 – 31	1	Trace switch. Valid entries are: **0** No trace. **1** Trace.
32 – 32	1	Blank.
33 – 33	1	Media switch. Valid entries are: **0** Disk. **1** Tape (VSE only). **Note:** BITAPE label is required.
32 – 80	47	Not used. Must be blanks.

Abort Information   If the program detects a processing irregularity, it displays an abort code on the operator's console and the printer.

Code	Description
0001	No control card was loaded.
0002	Application ID on the control card is invalid.
0003	API external record code on the control card is invalid.
0004	User ID on the control card is invalid.

Code	Description
0005	Trace switch on the control card is invalid.
0006	Media switch on the control card is invalid.
0007	OPEN failed on BIPRPT.
0008	OPEN failed on TP4.
0009	CLOSE failed on TP4.
0010	CLOSE failed on BIPRPT.
0011	GLOBAL COMMIT failed BISDBS.
0012	GLOBAL CLOSE failed BISDBS.
0013	READ failed on TP4.
0014	CALL failed on BISDBS.
0015	LOCK failed on BISDBS.
0016	WRITE failed on TP4.
0017	Invalid return code for BIPINFO.
0018	Record not available.
0019	Record is not defined as VSAM.
0020	BIPMSG-STAT is not equal to '00'.
0021	BIPDAT-STAT is not equal to '00'.
0022	Invalid BIPMSG status.

TIX040 – Time Investment 8.3.4 to 8.3.5 Migration

This program is used to migrate from Time Investment 8.3.4 to 8.3.5.

Note: Be sure to back up the 8.3.4 API records using program BIS861B from Runtime Components.

The record sizes have not changed; however, reserved fields were renamed and used for year-end reporting.

API MICM Records   None

API Application
Records

Ext Record Code	Name	Description
ACN	TIACN-RECORD	Account Numbers Record
ASG	TIASG-RECORD	Assignment/Caution Record
AVL	TIAVL-RECORD	TDOA Availability Record
BNK	TIBNK-RECORD	Institution Control Record
CST	TICST-RECORD	Customer Record
EMN	TIEMN-RECORD	Employer Account Numbers Record
EMP	TIEMP-RECORD	Employer Record
INT	TIINT-RECORD	Interest Payment History Record
IRA	TIIRA-RECORD	IRA/Keogh Record
LOG	TILOG-RECORD	Log Record
MST	TIMST-RECORD	Account Master Record
PAY	TIPAY-RECORD	Customer Payout History Record
RAT	TIRAT-RECORD	Rate Change History Record
TA1	TITA1-RECORD	Total Record – Amount
TA2	TITA2-RECORD	Total Record – Number
TRD	TITRD-RECORD	Transaction Description Record
TRN	TITRN-RECORD	Transaction History Record
XRL	TIXRL-RECORD	Statement Copies Record

Files

Name	Description	Opened	Media	Access Mode	Record Length
BIPUTIL	Backup Utility	Input	Tape	Sequential	Variable
PRNTER	Print File	Output	Printer	Sequential	133

Reports

Loaded Records by Record Type (from Runtime Components)

Control Card

The control card is required.

Columns	Size	Description
01 – 04	4	Application ID. Valid entry is **IPTI**.
05 – 05	1	Blank.
06 – 08	3	API external record code. Valid entry is **BNK**.
09 – 09	1	Blank.
10 – 17	8	User ID. Valid entry is **INFOPNT**.
18 – 18	1	Blank.
19 – 20	2	Language code. Valid entry is **EN**.
21 – 30	10	Blank.
31 – 31	1	Trace switch. Valid entries are: **0** No trace. **1** Trace.
32 – 32	1	Blank.
33 – 33	1	Media switch. Valid entries are: **0** Disk. **1** Tape (VSE only). **Note:** BITAPE label is required.
32 – 80	47	Not used. Must be blanks.

Abort Information

If the program detects a processing irregularity, it displays an abort code on the operator's console and the printer.

Code	Description
0001	No control card was loaded.
0002	Application ID on the control card is invalid.
0003	API external record code on the control card is invalid.
0004	User ID on the control card is invalid.

Code	Description
0005	Trace switch on the control card is invalid.
0006	Media switch on the control card is invalid.
0007	OPEN failed on BIPRPT.
0008	OPEN failed on TP4.
0009	CLOSE failed on TP4.
0010	CLOSE failed on BIPRPT.
0011	GLOBAL COMMIT failed BISDBS.
0012	GLOBAL CLOSE failed BISDBS.
0013	READ failed on TP4.
0014	CALL failed on BISDBS.
0015	LOCK failed on BISDBS.
0016	WRITE failed on TP4.
0017	Invalid return code for BIPINFO.
0018	Record not available.
0019	Record is not defined as VSAM.
0020	BIPMSG-STAT is not equal to '00'.
0021	BIPDAT-STAT is not equal to '00'.
0022	Invalid BIPMSG status.

TIX500 – MICM Conversion

Purpose

This program creates a new MICM Record 2013 (Transaction Code Parameters) from MICM Record 0326 for applications '08' (external transactions) and '98' (internal transactions).

A control card indicates if records are being added or deleted. Complete one control card for each institution processed. Multiple control cards are allowed.

Delete the old records in a separate run *after* you have determined that the new records are converted and the old records are no longer needed.

A report prints with one page for each institution processed. Each control card is listed with messages for each error detected or processing option selected (if the control card is error free).

API MICM Records

Record	Ext Record Code	Name	Description
0326	M72	MI0326-RECORD	Transaction Code Parameters Record
1001	M74	MI1001-RECORD	Institution Information Record
2013	M13	MI2013-RECORD	Transaction Code Parameters Record

API Application Records

None

Files

Name	Description	Opened	Media	Access Mode	Record Length
MICARD	Control Card Input File	Input	Card	Sequential	80
MIMAST	MICM Master File	Input	Disk	Random	Variable
PRINTER	Printer File	Output	Printer	Sequential	133

Reports

08-500 – TI 8.3 Conversion Report

Control Card

The control card is required.

Columns	Size	Description
01 – 02	2	System number. Valid entry is **00**.
03 – 05	3	Institution number.

Columns	Size	Description
06 – 13	8	Form numbers to delete or add. Valid entries are **2013** (to add) or **0326** (to delete) for each institution. Only two forms per card are allowed. However, processing stops at either a blank form or at the second (or last) occurrence in a card. No processing code is required, since the function allowed for each form is unique. (For example, enter **2013** to create MICM Record 2013; enter **0326** to delete MICM Record 0326 for applications '08' and '98').
22 – 80	67	Not used. Must be blanks.

Abort Information

If the program detects a processing irregularity, it displays an abort code on the operator's console and the printer.

Code	Description
0001	OPEN failed on MIMAST.
0002	START failed on MICM Record 0326.
0003	READ NEXT failed on MICM Record 0326.
0004	ADD failed on MICM Record 2013.
0005	START failed on MICM Record 0326.
0006	READ NEXT failed on MICM Record 0326.
0007	WRITE failed on MICM Record 0326.
0008	CLOSE failed on MIMAST.

TIX510 – MICM 8.3 Conversion

Purpose

This program creates new MICM master file records in the format needed for the 8.3 release of Time Investment. A control card indicates which form numbers are to be created.

API MICM Records

Record	Ext Record Code	Name	Description
1001	M74	MI1001-RECORD	Institution Information Record
3500	M00	MI3500-RECORD	Time Investment Institution Parameters Record
3501	M01	MI3501-RECORD	Time Investment Type Defaults Record
3502	M02	MI3502-RECORD	Time Investment Type Processing Parameters Record
3503	M03	MI3503-RECORD	Time Investment Penalty Routines Record
3504	M04	MI3504-RECORD	Time Investment Interest Rate Tables Record
3506	M06	MI3506-RECORD	Time Investment Title Record
3507	M07	MI3507-RECORD	Time Investment Service Charge Parameters Record

API Application Records

None

Files

Name	Description	Opened	Media	Access Mode	Record Length
MICARD	Control Card	Input	Card	Sequential	80
MIMAST	MICM Master File	Input	Disk	Random	Variable
PRNTER	Printer File	Output	Printer	Sequential	133

Reports

08-510 – TI 8.3 MICM Conversion Report

Control Card

The control card is required. Complete one control card for each institution processed.

Columns	Size	Description
01 – 02	2	Manager number. Valid entry is **00**.
03 – 05	8	Institution number.
06 – 29	24	Form number. Four-digit form number to be added, converted, or deleted for each institution. Up to 6 forms are allowed on the card; however, processing stops at a blank card.
30 – 80	51	Not used.

Abort Information

If the program detects a processing irregularity, it displays an abort code on the operator's console and the printer.

Code	Description
0001	OPEN failed on MIMAST.
0002	START BROWSE failed on MICM Record 3500.
0003	READ NEXT failed on MICM Record 3500.
0004	WRITE failed on MICM Record 3500.
0005	START BROWSE failed on MICM Record 3501.
0006	READ NEXT failed on MICM Record 3501.
0007	WRITE failed on MICM Record 3501.
0008	START BROWSE failed on MICM Record 3502.
0009	READ NEXT failed on MICM Record 3502.
0010	WRITE failed on MICM Record 3502.
0011	START BROWSE failed on MICM Record 3503.
0012	READ NEXT failed on MICM Record 3503.
0013	WRITE failed on MICM Record 3503.
0014	START BROWSE failed on MICM Record 3504.
0015	READ NEXT failed on MICM Record 3504.
0016	WRITE failed on MICM Record 3504.
0017	START BROWSE failed on MICM Record 3507.
0018	READ NEXT failed on MICM Record 3507.
0019	WRITE failed on MICM Record 3507.
0020	CLOSE failed on MIMAST.

TIX520 – MICM 8.3.1 Conversion

Purpose   This program reads MICM Record 3504 (Time Investment Interest Rate Table)
                   and adds a new Amount Code field to the record. The control card indicates the
                   institutions and MICM record, which is always '3504'.

API MICM Records

Record	Ext Record Code	Name	Description
1001	M74	MI1001-RECORD	Institution Information Record
3504	M04	MI3504-RECORD	Time Investment Interest Rate Tables Record

API Application   None
Records

Files

Name	Description	Opened	Media	Access Mode	Record Length
MICARD	Control Card	Input	Card	Sequential	80
MIMAST	MICM Master File	I/O	Disk	Random	Variable
PRNTER	Printer File	Output	Printer	Sequential	133

Reports   08-520 – Time Investment 8.3.1 MICM Conversion Report

Control Card   The control card is required.

Columns	Size	Description
01 – 02	2	Manager number. Valid entry is **00**.
03 – 05	3	Institution number.
06 – 09	4	Form number. Valid entry is **3504**.
10 – 80	71	Not used. Must be blanks.

Abort Information If the program detects a processing irregularity, it displays an abort code on the
                   operator's console and the printer.

Code	Description
0001	OPEN failed on MIMAST.
0002	START BROWSE failed on MICM Record 3504.

Code	Description
0003	READ NEXT failed on MICM Record 3504.
0004	WRITE failed on MICM Record 3504.
0005	CLOSE failed on MIMAST.

TIX820 – Time Investment 8.1 to 8.3 Conversion

Purpose
This program is used to convert the Time Investment 8.1 permanent files into the Time Investment 8.3 API environment.

API MICM Records
None

API Application Records

Ext Record Code	Name	Description
ACN	TIACN-RECORD	Account Numbers Record
ASG	TIASG-RECORD	Assignment/Caution Record
AVL	TIAVL-RECORD	TDOA Availability Record
BNK	TIBNK-RECORD	Institution Control Record
CST	TICST-RECORD	Customer Record
EMN	TIEMN-RECORD	Employer Account Numbers Record
EMP	TIEMP-RECORD	Employer Record
INT	TIINT-RECORD	Interest Payment History Record
IRA	TIIRA-RECORD	IRA/Keogh Record
MST	TIMST-RECORD	Account Master Record
PAY	TIPAY-RECORD	Customer Payout History Record
RAT	TIRAT-RECORD	Rate Change History Record
TA1	TITA1-RECORD	Total Record – Amount
TA2	TITA2-RECORD	Total Record – Number
TRD	TITRD-RECORD	Transaction Description Record
TRN	TITRN-RECORD	Transaction History Record
XRL	TIXRL-RECORD	Statement Copies Record

Files

Name	Description	Opened	Media	Access Mode	Record Length
TICARD	Control Card	Input	Card	Sequential	80
TIBKUP	TI 8.1 Backup File	Input	Tape	Sequential	Variable
SORTWK1	Sort Work File	I/O	Disk	Sequential	Variable

Name	Description	Opened	Media	Access Mode	Record Length
PRNTER	Printer File	Output	Printer	Sequential	133

Reports   08-920 – TI 8.1 to 8.3 Conversion

Control Card   The control card is required.

Columns	Size	Description
01 – 02	2	System number. Valid entry is **08**.
03 – 10	8	Program ID. Valid entry is **TIX820**.
11 – 11	1	Access method. Valid entries are: **D** Database. **V** VSAM.
12 – 80	69	Not used.

Abort Information   If the program detects a processing irregularity, it displays an abort code on the operator's console and the printer.

Code	Description
0001	Invalid Overflow Record Code on TIBKUP.
0002	System number on control card is invalid.
0003	Program name on control card is invalid.
0004	Access method on control card is invalid.
0005	ADD failed on BNK.
0006	ADD failed on MST.
0007	ADD failed on CST.
0008	ADD failed on ACN.
0009	ADD failed on ASG.
0010	ADD failed on AVL.
0011	ADD failed on EMN.
0012	ADD failed on INT.
0013	ADD failed on IRA.
0014	ADD failed on PAY.
0015	ADD failed on RAT.

Code	Description
0016	ADD failed on TRN.
0017	ADD failed on XRL.
0018	ADD failed on TA1.
0019	ADD failed on TA2.
0020	ADD failed on EMP.
0021	ADD failed on TRD.
0022	Invalid return from SORT.
0023	ADD failed on MST.
0024	READ failed on MST.

TIX822 – Time Investment 8.3 Reg DD Variable Rate TDOA Conversion

Purpose
This program is used to calculate the ENP for the current statement period for variable rate TDOA's based on the Availability Records. Once the amount is determined, the Account Master Record is updated.

API MICM Records
None

API Application Records

Ext Record Code	Name	Description
AVL	TIAVL-RECORD	Availability Record
BNK	TIBNK-RECORD	Institution Control Record
MST	TIMST-RECORD	Master Record

Files

Name	Description	Opened	Media	Access Mode	Record Length
PRNTER	Printer File	Output	Printer	Sequential	133

Reports
08-922 – Variable Rate TDOA Reg DD Conversion

Control Card
None

Abort Information
If the program detects a processing irregularity, it displays an abort code on the operator's console and the printer.

Code	Description
0001	READ failed on BNK.
0002	OPEN failed on MST.
0003	OPEN failed on AVL.
0004	READ NEXT failed on AVL.
0005	REWRITE failed on MST.
0006	READ failed on MST.
0007	CLOSE failed on BNK.
0008	CLOSE failed on MST.
0009	CLOSE failed on AVL.

Reports

The following reports are run during migration processing of Time Investment.

08-920 – TI 8.1 to 8.3 Conversion

Purpose   This report lists the number of records converted to the Time Investment 8.3 API environment. The time of day the report is run prints in the report heading. Converted information prints for each institution in Time Investment.

Program   TIX820 – Time Investment 8.1 to 8.3 Conversion

```
   02-13-1994                                                                           PAGE    1

   TIME INVESTMENT                   TI 8.1 TO 8.3 CONVERSION                                08-920
   TIME  12.25.35
                                     ** FILES RELOADED THIS RUN **

                                     ISBANK - BANK CONTROL FILE
                                     ISMAST - MASTER FILE
                                     ISCUST - CUSTOMER FILE
                                     ISOVFL - OVERFLOW FILE
                                     ISTOTL - TOTALS FILE
                                     ISEMPL - EMPLOYER FILE

 INST    CUR-DATE   *--- ISBANK ---*  *--- ISMAST----*  *--- ISCUST ---*  *--- ISOVFL ---*  *--- ISTOTL ---*  *--- ISEMPL ---*
                    *--- ISCAPT ---*  *--- ISACTY ---*  *--- ISACT2 ---*  *--- ISACT3 ---*  *--- ISCRDO----*  *--- ISEXCP ---*
                    *--- ISPODX ---*  *--- ISPROF ---*  *--- ISRPTA ---*  *--- ISRPTB ---*  *--- ISRPTD ---*  *--- ISRPTJ ---*
                    *--- ISRPTU ---*  *--- ISSTMT ---*  *--- ISYEAR ---*

                    LOADED DROPPED    LOADED DROPPED    LOADED DROPPED    LOADED DROPPED    LOADED DROPPED    LOADED DROPPED

  000    2-13-1994      1      0         0      0         0      0         1      0         0      0         0      0
                        0      0         0      0         0      0         0      0         0      0         0      0
                        0      0         0      0         0      0         0      0         0      0         0      0
                        0      0         0      0         0      0

  001    2-13-1994      1      0      4264      0      1235      0     24557      0        24      0         0      0
                        0      0         0      0         0      0         0      0         0      0         0      0
                        0      0         0      0         0      0         0      0         0      0         0      0
                        0      0         0      0         0      0

  002    2-13-1994      1      0      1532      0       692      0     16431      0        11      0         0      0
                        0      0         0      0         0      0         0      0         0      0         0      0
                        0      0         0      0         0      0         0      0         0      0         0      0
                        0      0         0      0         0      0

  TOTAL COUNT           3      0      5796      0      1927      0     40988      0        35      0         0      0
                        0      0         0      0         0      0         0      0         0      0         0      0
                        0      0         0      0         0      0         0      0         0      0         0      0
                        0      0         0      0         0      0
```

08-920 – TI 8.1 to 8.3 Conversion

Heading Descriptions

Files Reloaded This Run   Files Reloaded this Run. Files reloaded during this run.

Inst   Institution Number.

Cur-date   Current Processing Date.

ISBANK   Institution Control File.

ISMAST   Master File.

ISCUST   Customer Control File.

ISOVFL   Overflow File.

ISTOTL   Total File.

ISEMPL   Employer File.

ISCAPT   Capture File.

ISACTY   Activity File.

ISACT2   Activity 2 File.

ISACT3   Activity 3 File.

ISCRDO   Maintenance Input File.

ISEXCP   Exceptions File.

ISPODX   POD Extract File.

ISPROF   Profitability File.

ISRPTA   Reports File (from ISD220).

ISRPTB   Reports File (from ISD200).

ISRPTD   Reports File.

ISRPTJ   Reports File for online maintenance (from ISJ200).

ISRPTU   Reports File (from ISJ200).

ISSTMT   Statement File.

ISYEAR   Reports File for year-end reporting (from ISY050).

Total Count   Total Count. Total number of records dropped or loaded for each category listed
                            above.

08-922 – Variable Rate TDOA Reg DD Conversion

Purpose   This report shows the interest earned, but not paid (ENP) for the current
                        statement period for variable rate TDOAs, based on the Availability Records.

Program   TIX822 – Time Investment 8.3 Reg DD Variable Rate TDOA Conversion

```
    04-08-1994                          002 SECOND NATIONAL BANK OF AMERICA                              PAGE      1

    TIME INVESTMENT                      VARIABLE RATE TDOA REG DD CONVERSION                             08-922
                    ACCOUNT NUMBER       ACCRUALS FOR THIS STATEMENT PERIOD
                    000000000009700005            6.80000
                    000000000009700013           13.50000
                    000000000009700021           60.90000
                    000000000009700048           20.80000
                    000000000009700056           14.20000
                    000000000009700064            4.90000
                    000000000009700072           14.00000
                    000000000009700080           13.70000
                    000000000009700099            7.30000
                    000000000009700102           14.30000
                    000000000009700110            4.90000
                    000000000009700129           25.40000
                    000000000009700145           26.80000
                    000000000009700153           14.20000
                    000000000009700161           13.50000
                    000000000009700218           26.60000
                    000000000009700226           11.90000
                    000000000009700234           11.90000
                    000000000009700242            7.70000
                    000000000009700250           23.60000
                    000000000009700269           17.50000
                    000000000009700315           17.90000
                    000000000009700331           18.00000
                    000000000009700358           18.00000
                    000000000009700366            0.40000
                    000000000009700382            8.60000
                    000000000009700392           10.30000
                    000000000009700404            4.70000
                    000000000009700412           14.10000
                    000000000009700420            9.10000
                    000000000009700439            5.70000
                    000000000009700447            9.70000
                    000000000009700455            6.00000
                    000000000009700463            3.50000
                    000000000009700501           17.10000
                    000000000009700528           14.50000
                    000000000009700536           12.10000
                    000000000009700544           17.00000
                    000000000009700552           17.00000
                    000000000009700595           28.00000
                    000000000009700609            2.10000
                    000000000009700676            4.00000
                    000000000009700684            9.60000
                    000000000009700692            4.80000
                    000000000009700706            9.60000
                    000000000009700722            6.00000
                    000000000009700730            6.00000
                    000000000009700749           11.50000
                    000000000009700773           16.60000

                    *** VARIABLE RATE TDOAS PROCESSED FOR THIS BANK ***            79

                    *** TOTAL NUMBER OF VARIABLE RATE TDOAS PROCESSED ***         300
```

08-922 – Variable Rate TDOA Reg DD Conversion

Heading Descriptions

Account Number   Account Number. Time deposit open account (TDOA) numbers.

Accruals for this   ENP calculated for the current statement period.
Statement Period

(Totals)   Totals. Totals are printed by institution, as well as an overall total.

08-930 – Time Investment 8.3.1 to 8.3.2 Migration

Purpose   This report shows the API records that have been loaded for migration from
                       Time Investment 8.3.1 to 8.3.2.

Program   TIX030 – Time Investment 8.3.1 to 8.3.2 Migration

```
TIX030  --------------LOADED RECORDS BY RECORD TYPE----------------
USER          DATE        TIME
INFOPNT       05/02/96    12.23.09
RECORD CODE   PHYSICAL ID   DBS ORG     COUNT       DUPS
RAD           TIFL01      000000            3             0

RAF           TIFL02      000000            3             0

RAL           TIFL03      000000           39             0

RBB           TIFL04      000000            1             0

RAK           TIFL05      000000            4             0

RAA           TIFL08      000000           39             0

RAX           TIFL10      000000            4             0

RAZ           TIFL12      000000            4             0
```

08-930 – Time Investment 8.3.1 to 8.3.2 Migration

Heading Descriptions

Record Code   Record Code. Internal API record code of the record being loaded.

Physical ID   Physical ID. Physical file identification to which the API record has been loaded.

DBS Org   DBS Organization. Indicates the institution to which the API record belongs.

Count   Count. Number of records counted.

Dups   Duplicates. Number of duplicate records that exist.

08-940 – Time Investment 8.3.4 to 8.3.5 Migration

Purpose   This report shows the API records that have been loaded for migration from Time Investment 8.3.4 to 8.3.5.

Program   TIX040 – Time Investment 8.3.4 to 8.3.5 Migration

```
TIX040   --------------LOADED RECORDS BY RECORD TYPE---------------
USER          DATE        TIME
INFOPNT       01/03/05    10.45.10
RECORD CODE   PHYSICAL ID   DBS ORG        COUNT          DUPS
RAC           TIFL01        000000            1             0

RAD           TIFL01        000000            3             0

RAF           TIFL02        000000           27             0

RAL           TIFL03        000000           37             0

RBB           TIFL04        000000          113             0

RAK           TIFL05        000000          100             0

RAI           TIFL06        000000            5             0

RAJ           TIFL06        000000           25             0
```

08-940 – Time Investment 8.3.4 to 8.3.5 Migration

Heading Descriptions

Record Code   Record Code. Internal API record code of the record being loaded.

Physical ID   Physical ID. Physical file identification to which the API record has been loaded.

DBS Org   DBS Organization. Indicates the institution to which the API record belongs.

Count   Count. Number of records counted.

Dups   Duplicates. Number of duplicate records that exist.

Glossary

abort
Premature termination of a procedure.

account analysis
Procedure in which a customer's accounts are linked together and analyzed for profitability or loss. The more institution services the customer utilizes, the more information that is fed into Profitability, the clearer the picture is for the institution about that customer.

account reconciliation
Process that accounts for the difference in two records by accounting for each item outstanding and bringing the two records into agreement.

accrual base
Option of either a 30-day or an actual-day month that the system uses for interest accrual calculation.

activity recap
Daily summary report of all institution activity.

activity statement
Statement sent to a customer showing the customer's daily, weekly, or monthly activity.

alphanumeric
Set of characters that contains letters, digits, and/or other characters.

ANSI
American National Standards Institute.

application
Time Investment.

assignment
Occurs when an account is used as collateral for a loan or other institution services. Placing an assignment on the account lets all institution personnel know that the accounts may not be paid out until the service is satisfied.

automatic renewal
Account is automatically re-invested for that customer, for the stipulated time period and interest rate.

available balance
Current balance of an account, less holds, less floats.

available funds
Funds available to the customer.

available interest
Interest that a customer has earned and is available for him to withdraw. This term correlates with interest earned not paid.

average collected balance
Collected balances for a given time period added, then, the number of days in the time period divided into the total amount of collected balances, thus giving the average collected balance for that time period.

bank float
Float time that it takes for an item deposited in one institution to be sent to the item's (on-us) institution to clear. The float time involved is from institution to institution clearance time.

batch system
System that does not operate in an online mode.

beneficiary
Recipient that would receive funds upon the death of the customer having the Time Investment account.

binary
Number system that uses '2'as a base and the digits '0' and '1' to define a characteristic, property, or condition.

block, batch, sequence number, sub-sequence number
Terms that coordinate with the 'capture items' part of a system. Items captured are assigned block, batch, sequence number, and sub-sequence numbers for research purposes - a block of work is a group of items, batches of work are subgroups within a block, sequence numbers are numbers assigned to each item in a batch, sub-sequence numbers are a sub-group in a sequence number.

bucket
Portion of computer storage reserved for accumulating data or totals.

capitalization
Occurs when the interest paid is added to the principal resulting in higher earnings. The interest is also added to available interest to be used as penalty free withdrawals.

Capture File
File that contains captured transactions (whether they be MICR-read or a file built into the capture file format) used as input for processing and posting to the system.

caution
Primarily used for watching an account and its activity. In instances of needing to be concerned with the flow of funds through an account (transactions) for institution purposes, the account has a caution placed upon it, segregating it by a code or flag on reports so it is easily recognizable to institution personnel.

class
Secondary method of categorizing accounts within types of accounts. This is a user-defined field.

closed to posting
Occurs when an account is coded to a non-acceptance status for all or certain transactions.

COBOL
Common Business Oriented Language. This is a specific computer language by which business data processing procedures may be precisely described in a standard form.

collateral
An instrument with a monetary value that can be held as security for a loan or other institution services. If the customer is unable to fulfill his financial responsibilities, the collateral may then be used to repay the debt owed to the institution.

collected balance
Current balance of an account, less float.

compounding
Interest earned is moved to a compounding amount field to be used along with the current balance for accruals in TID200.

contributions made after year-end
Contributions made after December 31. Contributions are allowed to the previous year IRA until April 15 of the current year.

correspondent institution
Institution with which your institution has a banking relationship. This relationship could include such services as loan participation, money supply, investment of institution funds, etc.

credit for which float items are generated
Credit that has debit items corresponding to it that are not immediate funds to the institution or customer thus needing float amount/time generated while collection of monies is in process.

current balance
Net results of all debits and credits posted against the account.

customer control number
Each customer is assigned a number that is exclusive to that customer. The customer control number is primarily used for IRA/Keogh processing.

customer float
Float time that is passed on to the customer while the institution is collecting funds deposited from the item's institution.

customer key
Group of characters that identifies a customer. The key consists of the first six positions of the customer's last name, first initial, and a four-position tie breaker.

cutoff statement
Account activity statement sent to a customer on recurring days or months, or periodically. These statements may be sent to the customer on a cycle schedule also. The statement shows all the transactions that affected the account for the statement time period involved.

debit reversal
Reversal of a debit transaction that was in error.

default value
Values that are automatically supplied and used by the system when the required information is not supplied.

disbursement
Amount paid out from an account for such reasons as interest payment, principal payment or an IRA payment.

disk storage
Storage on a rotating disk, which is a direct access device that records data magnetically.

distribution withdrawal
Amount paid out from an IRA/Keogh to the customer as a result of his investment return.

dormant account
Account with little or no activity for a period specified by the institution.

early redemption
Account is closed out before the account reaches maturity. The customer suffers a penalty for early withdrawal.

edit
Rearranging of data or information involving the deletion of unwanted data, the addition of data, or the testing of data.

employer contribution
Contribution made by an employer for an employee's account.

equal payments
Amounts owed to a customer may be paid to him in specified equal payments (same amount of payment each pay period).

external transaction code
Transaction code the system uses externally (printed, written, or encoded on document) to input transactions into the system. This code differentiates between types of transactions. The external transaction code is linked to the internal transaction code during the system processing for transaction posting.

effective date processing
Type of processing which automatically adjusts interest accruals in an account, from the effective date of the transaction.

float
Amount of funds in the process of collection, represented by local or foreign items deposited to one institution but drawn on other institutions.

field
In a record, a specified area used for a type of data, for example, a 6-position area to designate an effective date.

file maintenance
Processing of a permanent file designed to take care of the non-periodic changes within it.

final maturity date
Date on which the certificate matures and monies are due/available to the customer without penalty.

frequency
Specified time in which reports or statements are output by the system.

holding company
Company that is in ownership of institutions. The holding company has responsibility for all institutions owned by that company. Holding companies are normally found in states that do not allow branch banking, thus allowing the holding company to have control over it's institutions as an institution would have control over it's branches.

insurance contribution
Contribution made from an insurance annuity or an insurance investment that is deposited into an IRA account.

Institution Control Record
Record found in the system that contains the processing days of the institution.

interest
Amount of monies accrued and earned on an account for a period of time depending on the stipulations agreed upon.

interest 1099 form
Form that interest earned is reported to the internal revenue service each year.

interest earned not paid
Interest an account has earned/accrued but has not been paid out to the customer.

interest penalty
Occurs when a person wishes to withdraw an investment before its maturity date. The customer is penalized by law for early withdrawal of funds.

interest per diem
Daily interest amount an account earns or accrues.

interest rate
Annual rate of interest an account is paid or earns.

interface
Common boundary between automatic data processing systems or between parts of a single system.

internal transaction code
Transaction code the system uses internally to process a transaction.

I/O routines
Input-output routines.

IRA
Individual Retirement Account.

issue value
Value of the certificate at the opening of account.

item
Debit or credit instrument or document that represents or causes the movement of monetary values.

justified
Adjusting, arranging, or shifting of digits to the left or right of a field, to fit a prescribed pattern.

Keogh
Individual retirement account for self employed persons.

library
Collection of computer programs and routines available to a computer for the processing of data.

logo screen
Infopoint or the initials of the institution are displayed on the terminal once a transaction has been completed.

Master Information and Control Manager
All processing parameters, institution options, and customer information are stored and maintained in this system. With this system, a customer may have a single customer name and address record linked to an unlimited number of Time Investment accounts.

maintenance
Periodic changes or updates to a file to incorporate changes that have occurred.

mass maintenance
Maintenance to a field or fields applied to a whole group of accounts. Examples of mass maintenance groups are type, branch, institution, dormant, and employee code.

Master File
Collection of related records used in a computer system to store, process, or generate information.

maximum contribution
Maximum amount a person is allowed to contribute to an IRA/Keogh for a particular year.

maximum rate
Maximum interest rate allowed by law for a type of interest-earning account.

mnemonic code
Alphanumeric code which represents the function or purpose of an operation.

negotiable code
Instrument that may be traded, cashed in, or sold, subject to the terms of the contract on the instrument.

NSF
Non-sufficient Funds. When a depositor's balance is inadequate for the institution to pay a check drawn against the account's available balance.

non-deductible
Monies deposited to an IRA that may not be taken as an IRA deduction.

offline
System whose peripheral equipment and devices are not under the control of a central processing unit.

OID
Original Issue Discount certificate. The interest payment frequency is greater than one year. Special reporting is done for these accounts at year-end.

online
System whose peripheral equipment and devices are under the control of a central processing unit, and are integrated with the main flow of transaction processing.

operator ID
Identification of the operator entering data through the terminal. It is used by the system to validate the accessibility of the operator to the online system.

over contribution
Occurs when a customer makes a contribution to his IRA, thus increasing the balance above and beyond his legal limit. The customer is then notified to withdraw the excess amount.

overdraft
Occurs when a customer's account balance goes into a negative status.

partial key data
Information needed to add, inquire or update customer account information. Some of the characters are missing.

passbook instrument
The customer holds a passbook for entry of transactions. The system determines booked versus non-booked transactions. This type of instrument would be in lieu of a statement account.

password
Confidential identification name entered by the operator. This is used by the system to validate accessibility of the operator using online.

payout information
Information concerning funds being paid out to an individual. This includes payment frequency, next payment date, payment amount, and method of payout.

parameters
Constant values through which the user controls system processing.

partial redemption
Occurs when a portion of a certificate is redeemed. The redemption amount affects the current balance of the certificate.

peripheral equipment
Units that operate in conjunction with a computer, and yet are not part of it, such as printers, card readers, etc.

principal
Original dollar amount of an account that is the base for which interest is calculated.

protected
Refers to fields that cannot be altered by the operator.

public funds
Funds in which the depositor or investor is a public entity such as a city or county government account.

purged accounts
Accounts deleted from the file at a prescribed time after the account is closed.

random access
File is accessed through the use of a key. You go directly to the record you want without having to read all others before it. This function is not dependent on the last access of data.

rate change
Occurs when an interest rate changes on a current investment and the account's interest rate is changed to accrue interest at the proper rate.

record
Collection of related fields of data, which relates to one area in a data processing activity.

redemption
Occurs when the certificate has matured and the account is being closed by either reinvestment of funds or cashing the certificate in and receiving the monies from it.

regular contribution
Normal periodic contribution made to an IRA/Keogh, thus adding to the balance of the IRA. This is done by the customer.

reject
Transaction that is unacceptable for processing due to an error in the data submitted.

relational customer
Customer who is allowed to receive information (statements, etc.) about another customer's account.

responsibility accounting
Information gathered for the accounting department to determine cost centers in the institution to provide for accurate accounting costs for institution services and personnel.

reversal
This transaction is processed when a previous transaction needs to be reversed, such as an interest payment.

right justified
Adjusting, arranging, or shifting of digits to the right of a field to fit a prescribed pattern.

rollover contribution
Contribution made into an IRA from a rollover from another IRA. The amount is rolled over into the IRA.

routing-transit number
Number assigned by the Federal Reserve System for each individual institution entity for institution identification and item clearing purposes.

safekeeping
Occurs when the institution physically holds/stores personal belongings for a customer per their request.

Savings account
Interest-bearing account earning a certain percentage of interest allowable by law subject to service charges depending on guidelines set by the institution.

SEP
Simplified Employee Pension plan. This plan must be qualified by the government.

sequential
File accessed by reading one record at a time until you reach the record that you need. A sequential read only reads forward, it does not read backward.

serial number
Number encoded or printed on the check for check reconciliation purposes.

service charge
Fee that is assessed to an account for services rendered. The fee is calculated taking into consideration a dollar balance and account activity.

service charge calculation
Calculation whereby accounts are checked to see if they are the criteria for a service charge. The calculation includes such considerations as number of debits, number of credits, account balances, etc.

service chargeable credit
Credit that contains float and a count subject to service charges.

service fee
Flat fee that is assessed an account for services rendered, at a determined time.

signature card index number
Number assigned to an account making it possible through a signature card system to verify a customer's signature. The number gives the location of the account in the file.

simple daily interest calculation
Annual interest rate divided by the number of days in that year (year base), multiplied by the account amount gives the interest amount for one day.

single maturity
Certificate of deposit that runs for the term stated on the issue date, and must be redeemed at that time.

snapshot statement
Account activity statement that may be requested at any time that includes all activity from the last statement date. The snapshot statement has no effect on the next statement date or the activity shown on that statement.

source of input
Code used to show where the input was originated, thus providing an audit trail and a source of communication if needed.

statement cycle
Stipulated time interval used to control statement printing.

subroutine
Portion of a routine that causes a computer to carry out a well-defined mathematical or logical operation.

system control record
System control record is a record (Institution 000) used to control the system processing.

tax exempt status
Occurs when a customer is exempt from having federal income tax deducted by the institution.

TDOA
Time Deposit Open Account.

transfer
Moving of funds from one account to another.

type
Type differences are the primary method of categorizing accounts with equal parameters.

type rate change
Function whereby maintenance may be input into the system to change an interest rate in a certain type. Upon the effective date of this maintenance the account would begin earning interest at the new rate.

unmatched reversal
Reversal entry could not find a match with the coordinating transaction.

unprotected
Refers to fields that may be altered by the operator.

violation
Act of trying to access records online without the appropriate authorization.

working storage
Chapter of the internal storage reserved for data on which operations are being performed.

year base
Number of days in the year the system uses the interest accrual calculations. The institution has the option of selecting either a 360- or 365-day year.

Index

V

W