

HOME ACCOUNTS SYSTEM

Version 1.1

Paul Coxwell
30 Alford Road
Sutton-on-Sea
LN12 2HH
England


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*           HOME ACCOUNTS SYSTEM           *
*           Version 1.1                   *
*           June 1993                     *
*
*           A simple accounting system for the home user   *
*
*****
```

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1.
INTRODUCTION

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Welcome to HAC, a simple home accounts system. This package is intended for the average home user who wishes to maintain a record of transactions on checking, savings, and credit accounts without the complexity of a full double-entry accounting system.

HAC allows you to define up to 26 different accounts, each of which may be used to record details of a checking account, a savings account, or a credit or loan account. Transactions can be entered to any account at any time, and a reconciliation routine provides for checking your entries against a bank statement. Transfers between accounts and payments on credit accounts by check are easily performed with just one entry. Many people have transactions which are processed automatically by their bank on certain days, such as a monthly paycheck or an installment payment to a loan company. HAC allows you to set up a list of such transactions so that they will be entered automatically at the correct time. If the amount varies from week to week or month to month, you can have HAC ask you for the exact amount each time the entry is due. This system eliminates the risk of forgetting to enter such transactions.

HAC incorporates a context-sensitive help system to offer assistance without the need to refer to the manual. It is recommended, however, that you read through this guide at least once as the help text is, necessarily, brief. This is especially true of the more intricate features such as automatic transactions. This manual also contains details about configuring HAC to suit your particular requirements, including file paths and display attributes for color monitors.

System requirements are modest: HAC should run on any IBM PC-compatible system with 256K of store and DOS version 2.0 or later. A printer is desirable for obtaining account listings, but is not essential.

Please note that this package is released for public use without payment, so feel free to use and distribute copies of HAC as widely as you wish. Your comments and suggestions are always welcome; the address to write to is shown on the cover of this manual.

2.
INSTALLATION

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The instructions below will get you started with HAC. You will find more information about configuration in a later section of this manual; you are advised to become familiar with the package before attempting any configuration changes.

Note that HAC relies on the system clock being set to the correct date for some of its functions. If you do not have a clock which is automatically set at start-up, make sure that you always set the correct date before running HAC.

Two files from the distribution disk are required to run the program: HAC.EXE and HAC.HLP. All data files for transactions are created as and when needed. Note that the file HAC.HLP supplies the text for the context-sensitive help system; HAC will run without this file, but you will not be able to get on-line help.

SYSTEMS WITHOUT A FIXED DISK

Copy HAC.EXE and HAC.HLP on to a blank, formatted disk. Unless you keep old transactions for a very long time or are using an early IBM PC with single-sided disk drives you should have adequate space on the disk for all the data files.

Users of twin-drive systems can have HAC use the second drive to store data. Assuming that your disk with HAC.EXE is in drive A and that you will be using drive B for data, enter the following command:

```
ECHO DATA=B: >A:HAC.CFG
```

Format a disk for your data and insert it in the second drive before running HAC.

SYSTEMS WITH A FIXED DISK

Create a new directory for HAC and copy the files HAC.EXE and HAC.HLP into it. Because HAC always uses the default drive and directory for data files and to locate the on-line help file (unless altered by configuration changes), you should make sure that the new directory is made the default before running HAC. The suggested arrangement is to have a batch file named HAC.BAT located on a directory in your DOS path:

```
CHDIR \HAC
HAC %1
```

This example assumes that you created the directory with the name HAC. Change the first line of the file to match whatever name you actually used.

3.
GENERAL INFORMATION

=====

The first time you run HAC you will receive a message telling you that no data could be found. You will then be asked whether HAC should create a new set of records. Answering "Y" at this point will set up a new system and take you to the main menu. Note that you can leave HAC at any time by returning to the main menu and pressing F10.

You will not be able to enter any transactions until you have set up at least one account. The way to do this is covered in the following section, but before continuing you may wish to become acquainted with some general points about HAC.

DISPLAY LAYOUT

When you are working on an account the top line of the display shows the account identification letter (A through Z) and the name of the account, along with today's date on the right-hand side for your reference. The bottom line acts as a reminder, showing some of the main options available to you for each part of the program.

The system defaults assume a monochrome monitor. If you have a color display you can change the appearance of HAC's display by using a configuration file; this is described fully in a later section of this guide.

CONTEXT-SENSITIVE HELP

Pressing F1 at any time causes HAC to display help based on the part of the system you are currently using. Press Esc to remove the help display and continue. Some help text is longer than the display allows; if this is so you will see "PgDn" and/or "PgUp" appear at the bottom right-hand corner of the help display, indicating that you can use the PgDn and PgUp keys to move through the text.

Note that you can move the position of the help display by turning on Scroll Lock and using the up, down, left, and right arrow keys. The position you select will be used until you move the display again or exit the program.

EDITING

When entering data HAC usually presents a display containing several fields, each of which can be set to the required values. For example, a data entry display similar to the one shown below appears when entering a deposit to an account.

```
                Deposit
Date                > 8/05/92<
Detail
Amount
```

To enter new details into a field, simply start typing - any existing entry will be cleared. You can correct your entry or make changes to the current entry by using Home, End, Backspace, Delete, and the left and right arrow keys. Both insert and overwrite modes are available, selected by pressing Ins. The cursor changes size to indicate which mode is currently selected: a block cursor for insert and a line cursor for overwrite. Note that HAC sometimes provides a default entry in a field. An example of this is that when entering a transaction you will always be offered a date. You can leave the suggested value as it is or change it to whatever you require.

Use the up and down arrow keys or Tab and Shift-Tab to move between fields. When you are satisfied that all the fields contain the correct values, press F10 to accept the information. To abandon the entry, press Esc and you will be returned to your previous activity.

VALUE FORMATS

All amounts should be entered in dollars, using a decimal point for cents when required. Negative numbers are not accepted; whether an amount is treated as a debit or credit is determined by the context of the data being entered. All amounts entered will be adjusted to a standard form with two decimal places for cents.

DATE FORMATS

The standard format for dates is mm/dd/yy, but HAC is very flexible in interpreting user's input. For example, the following entries will all be accepted and all represent the same date - August 5th, 1992:

8/5/92
8.5.1992
08,05,92
5 AUG 92
August 5, 1992

All entries will be converted to the standard format used by HAC. If your system is set to British format conventions with a COUNTRY setting in your CONFIG.SYS file, the default date format changes to dd.mm.yy. The date of August 5, 1992 would be displayed as " 5.08.92".

Whenever you select an account to work on, HAC will initially offer you today's date as a default for transaction entry. If you are entering a series of transactions on the same account, HAC will offer you the last date you used.

Two quick methods for altering the date are provided. First, you can abbreviate a typed date by omitting the year if it is the same as the current year. An entry of "6/23", for example, will be interpreted as June 23, 1993 if the date on the system clock is currently any time in 1993. Second, you can press the plus or minus keys to increment or decrement the displayed date by one day. This feature is convenient when entering a series of transactions that span just a few days, and these keys were chosen to allow you to quickly adjust the date from the numeric keypad.

ERROR HANDLING

Whenever you enter something that HAC cannot handle, such as an invalid date or amount, you will be presented with an error message. Press Esc to remove the message and try again.

System problems such as a data file not found or an error in writing to the disk will cause the program to be terminated after the display of the appropriate error message. You should consult your operating system manual for details about handling such problems.

Critical errors can occur during the operation of almost any program. In the event of such an error, you will be informed of the nature of the error and asked to press "R" to

re-try the operation or "A" to abort the program. A typical example of a critical error would be trying to print something with no paper loaded into the printer. In this case you should load the printer with paper and press "R" to try the print operation again.

4.
ACCOUNT MAINTENANCE

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You must set up at least one account before you can use HAC to store details of transactions. Provision is made for up to 26 different accounts, identified by a letter A through Z. Each account may be classified into one of three categories: checking, savings, or credit/loan.

The category selected for an account determines two things. First, a different set of options is presented for entering transactions. A checking account, for example, provides sequential check numbering which is not required on other types of account. Second, for printing a summary of all accounts HAC lists the sub-total balance for each of the three categories as well as an overall balance. The selection of account type determines in which group the account will appear on the summary.

All new accounts are set up through the account maintenance menu, which is accessed by pressing F4 from the main menu. The menu display closely resembles that of the main menu, with 26 account codes listed and the account names against them. You can return to the main menu by pressing Esc.

SETTING UP A NEW ACCOUNT

Choose an unused account code and press the corresponding letter. You will be asked to confirm that you wish to create a new account, then presented with a data entry display. As with other data entry displays you should enter all the details then press F10 to accept the information. To abandon entry, press Esc.

The first field is used to select the type of account. Press the space-bar until the correct description appears. In general you should choose "Checking" for any checking account, "Savings" for any account in which you have savings but no check facility, and "Credit/Loan" for credit and charge cards, loans, and installment plan accounts.

The text you enter in the account name field is used to identify the account on menu displays, transaction listings, and account summaries. A typical entry might be "Acme Savings Bank."

The two fields for debit and credit default text are linked with two transaction options that are available on all accounts. Every account has two main options for entering

transactions - a checking account, for example, has options for "Check" and "Deposit." Two extra options are also available: "Miscellaneous debit" and "Miscellaneous credit." These can be used for transactions that do not fall into one of the other categories, such as bank charges. If you find that you regularly enter a miscellaneous debit or credit with the same detail text (e.g. "Interest earned") you can set up the text as a default by entering it in one of these two fields. Whenever you choose the miscellaneous debit or credit option on this account you will be presented with your chosen text as a default. (See also the ENTERING TRANSACTIONS section of this manual.)

The final field, check number, is of significance only for accounts of type Checking. HAC maintains a record of the next check number in sequence and updates it each time you enter a check. This field indicates the next check due to be used, and you can set it to the correct value when creating an account.

Once you have set all the fields to the correct values, press F10 to accept your entry and create the account. You can press Esc at any time prior to this to abandon the new account.

CHANGING OR DELETING AN EXISTING ACCOUNT

You can alter the details of an existing account by selecting the appropriate code, A through Z, from the account maintenance menu. The current details will be displayed in the form described above. Changes to the account name or account type will be reflected immediately in the menu listings and the transaction options available.

When editing an existing account, a fourth option appears for the account type field. To remove an account, press the space-bar until "DELETE" appears in this field, then press F10 to accept the entry. You will be asked to confirm that you really do want to delete the account in question. HAC will not allow you to delete an account unless the balance is zero and all transactions have been reconciled (see the VIEWING ACCOUNTS section of this guide for reconciliation details). All data relating to the deleted account is purged from the system, so be sure to print a transaction list, if required, before deleting an account.

5.
ENTERING TRANSACTIONS

=====

Select the account you wish to use by pressing the appropriate letter, A through Z, from the main menu. This will take you to a display showing the latest transactions, if any, entered for the chosen account. Transaction options are shown just below the account name on the left side of the display, and are accessed by the function keys F4, F5, F6, F7, and F8. The options listed against F5 and F6 are dependent on the type of account.

In all cases, the transaction requires a date, amount, and description. You will be offered a date as a default; this will be the current date or the date of the last transaction you entered on the account. If the transaction date is different, simply edit the date field before accepting the transaction. Remember that the plus and minus keys will allow you to quickly adjust the date forward or back a day at a time, and you can omit the year from a typed date if it is the same as the current year. Note that backdated transactions will automatically be inserted in the account record at the correct place to maintain chronological order. Whatever the type of transaction, press F10 when you have entered values for all the field and are satisfied that they are correct. Pressing Esc will abandon the entry.

CHECKING ACCOUNTS

Press F6 to enter a deposit. You will be prompted to enter the date, amount, and description. The latter will appear on the account listing for this transaction.

Press F5 to enter a check. Set up the date, amount, and detail fields as required for the transaction. HAC automatically records check numbers, and the last field indicates the check number that will be used for this entry. For example, if the last check you entered was number 100900, then you will be offered 100901 as the check number. You can move to this field and correct the number if necessary (e.g. a check was incorrectly filled in and destroyed). Check numbers in the range 000001 through 999999 are allowed, and are always displayed as a full six digits for consistent alignment in listings. Checks appear in the account listing as the check number followed by the detail description (e.g. "100901 Acme Inc.").

Sometimes it is the case that a check is drawn on one bank account to deposit funds into another. The "Credit A/C" field allows you to enter the corresponding credit to another

account simultaneously. For example, suppose that you are in account A (your checking account) and are writing a check to transfer money to account B (a savings account). After entering a description and the amount, move to the credit field and enter "B." When you accept this transaction, HAC will enter the check as normal, but will also enter a corresponding transaction to deposit the funds into the specified account. This relieves you of the trouble of going to your savings account and entering the transaction explicitly.

The credit transaction appears in the specified account, with the same date as the check, as "Transfer" followed by the checking account letter and the check number. The entry for the above example might appear as "Transfer: A-100902."

SAVINGS ACCOUNTS

Press F5 to enter a withdrawal from the account (debit) or F6 to enter a deposit (credit). In either case you will be prompted for the transaction date, amount, and description. Accept the entry with F10 when you are satisfied that all fields are correct.

CREDIT/LOAN ACCOUNTS

Press F5 to enter a credit-card purchase. You will be prompted on the data entry display for the date, amount, and description. Accept the entry with F10, as with all other transactions.

Press F6 to enter a payment made on a credit-card or loan account. If the payment is a simple cash deposit, enter the amount and a suitable description in the appropriate fields.

For payments made by check, HAC allows you to simultaneously enter the corresponding debit in your checking account. This is most useful when reconciling credit-card statements and making monthly payments. To use this facility, enter the amount then move to the "Checking A/C" field and enter the identification letter for the account on which the check is drawn. (You can overwrite this field with a space if you have entered a code by mistake.)

You will be presented with a check number in the last field, just as if you were entering a check directly from the checking account. You can alter the check number if it is incorrect. Notice that as soon as you enter a checking account code the detail field automatically changes to "Payment: X-999999," where "X" is the checking account code and "999999" is the check number. You can, if you wish, move

back to the detail field and edit this description. When you accept the transaction with F10, HAC will enter the credit on the account you are working on and automatically enter the corresponding check to the specified account. The transaction on your checking account will appear as the check number followed by "Account X," where "X" represents the credit/loan account to which the payment was made.

For example, if you are in account J (your credit card) and are making a payment from account A (your checking account) with check number 100903, you would enter "A" in the "Checking A/C" field. The transaction will appear as a credit in account J - "Payment: A-100903" - and a debit in account A - "100903 Account J."

MISCELLANEOUS DEBITS AND CREDITS

These two options are available on all three types of account and provide facilities for entering debits and credits not covered by other account options. Such transactions include bank charges, interest earned on savings, and so on.

Press F7 to enter a miscellaneous debit or F8 to enter a miscellaneous credit. In either case you will be prompted for the date, transaction description, and amount. Accept your entry with F10, as usual.

HAC allows you to set up default text for the description field in these two entries. Suppose, for example, that you regularly use a miscellaneous credit transaction to enter an amount as "Interest earned." To save having to type this text every time, go to the account maintenance menu and select the appropriate account (see the preceding section of this guide). Move down to the "Credit default" field and enter "Interest earned." Accept your changes and return to the main menu.

With this default set up, whenever you use the miscellaneous credit option on this account you will be presented with your chosen text as the description. Should you wish to enter a credit with some other description, just edit the field. Note that changing the default text from the account maintenance system will not have any effect on transactions already entered; it only affects future entries.

TRANSFER FUNDS

Transfers between accounts are often performed, such as moving funds from a checking account to a savings account or vice versa. To avoid the need to make two entries - one for each account - HAC provides a transfer option that will make both entries simultaneously.

Pressing F4 will display a data entry screen requesting the transaction date, amount to transfer, and the account to credit. The latter field must be completed with the identification letter of an existing account. On accepting the entry, HAC will debit the account you are currently working on and credit the account you specified in the "Credit A/C" field. The transaction will appear in the accounts as "Transfer to a/c X" and "Transfer from a/c Y" respectively, where "X" and "Y" are the account codes.

Note that there are two alternative ways of making a transfer when that transfer involves the use of a check. These are described in CHECKING ACCOUNTS and CREDIT/LOAN ACCOUNTS, above. The F4 option is provided for transfers that do not generally involve the use of a check.

6.
VIEWING ACCOUNTS

=====

You can select an account to view by pressing the corresponding letter, A through Z, from the main menu display. The account display shows the identification code and account name on the top line and the most recent transactions in the main area of the display, just below the transaction options. Each transaction is shown with the debit or credit amount in a separate column and a running balance in the right-most column. Debit balances (credit-card account, loan accounts, overdrawn checking accounts, and so on) appear enclosed in parentheses.

You can browse through the list of transactions by using the PgUp, PgDn, Home, End, and up and down arrow keys. Pressing Esc returns you to the main menu so that you can select a different account or perform account maintenance (or quit HAC). It is also possible to move quickly between existing accounts by using Ctrl-PgUp and Ctrl-PgDn. Using these keys skips unused accounts, so pressing Ctrl-PgDn from account G, for example, would take you to account J if accounts H and I are unused. If you press Ctrl-PgUp from the first account or Ctrl-PgDn from the last account in use, you will be returned to the main menu. Ctrl-Home and Ctrl-End switch you to the first and last active accounts respectively.

PRINTING TRANSACTIONS

You can obtain a printed list of transactions on an account by moving to the first transaction you want to print and pressing F9. After requesting confirmation, HAC will print every transaction from the one you selected to the most recent. You can list all transactions on file for an account by pressing Home followed by F9.

RECONCILIATION OF TRANSACTIONS

HAC provides a way in which you can check, or reconcile, your record of transactions against those which appear on your monthly bank statement. Each transaction that you enter is classed initially as unreconciled and appears on the account listing with an asterisk in the "Rec" column.

When you receive a bank statement you should compare it with HAC's record of the account. Locate each item that appears on the statement by moving the arrow markers on to

it, then press Enter. The asterisk marker will disappear, showing that the transaction is now classed as reconciled. To enable you to locate unreconciled transactions rapidly you can press Tab to move to the next entry that still has a marker against it. All reconciled entries in between are skipped. Shift-Tab moves back to the previous unreconciled entry. The "+" and "-" keys can be used in place of Tab and Shift-Tab respectively so that you can conveniently use the plus, minus, and Enter keys on the numeric pad when reconciling transactions. Note that if you reconcile an entry by mistake you can restore the marker by pressing Enter a second time.

Once you have finished marking transactions against your statement, the figure shown at the top of the screen for "Reconciled" should agree with the balance on the bank statement. The "Unreconciled" figure then shows the sum of transactions entered on the computer but not yet checked against a statement. The figures shown for the reconciled, unreconciled, and current balance follow the same format as the running balance figures with debit amounts being enclosed in parentheses.

ACCOUNTS SUMMARY

Press F3 from the main menu to see a brief summary of accounts. The figures show the sub-total of checking accounts, savings accounts, and credit/loan accounts, along with a grand total of all accounts. Press Esc to return to the main menu.

You can print a more detailed summary by pressing F9 while the brief summary is displayed. After requesting confirmation, HAC will print a list showing the current balance of each account, along with category sub-totals and a grand total.

PURGING TRANSACTIONS

The transaction list on an account can grow quite large, especially on regularly used accounts. HAC does not impose a fixed limit the number of transactions that can be stored, and this factor is determined primarily by available disk space.

You can delete old transactions from an account, just leaving a single "Balance brought-forward" amount. Choose the account to work on from the main menu, select the point at which you want the amended account record to start using the up and down keys as usual, and then press F2. You will be asked to confirm that you really do want to delete

transactions. Replying "Y" will cause all transactions up to and including the selected entry to be deleted from the file.

Once a transaction has been deleted in this way, HAC has no record of it whatsoever, so be sure to print a transaction list if you require one before purging data. As a safeguard, HAC will not allow you to purge data if any of the target transactions have not yet been reconciled.

7.
AUTOMATIC TRANSACTIONS

=====

Many people have transactions that are automatically processed by their bank at some regular interval. These include payments to an installment plan, a monthly salary that is deposited straight into a checking account, and so on. HAC provides a facility to have such transactions entered at the appropriate time. This system eliminates the risk of you forgetting to enter a regular transaction.

Each time you run HAC it checks all automatic transactions on file to see if any are due for entry. Any record with a date the is equal to or prior to today's date will be added automatically to the appropriate account before you see the main menu.

To set up an automatic entry, go to the account on which the entry is to be made and press F3. A data entry display with seven fields will appear. Enter the appropriate text or values in each field, as described over the page, then press F10 to accept the entry. You can abandon the entry at any time by pressing Esc.

Date Enter the date on which the first entry of this transaction is to be made.

Detail The text you enter here will be used to fill in the transaction description field each time the automatic entry is made.

Amount The amount entry consists of two fields. The first takes a normal amount and the second can be set to "Debit" or "Credit" by pressing the space-bar.

No. entries This field sets the number of times a transaction is to be entered. Each time HAC adds an automatic transaction to an account, the value in this field is decremented and the date stored in the first field is amended to reflect the date that the next entry is due. When the "Number of entries" field reaches zero (indicating that there are no more of these credits or debits due), HAC automatically deletes the automatic transaction record. If you want an automatic entry to be processed indefinitely you should set this field to zero; HAC will then not decrement the field and will continue to process the transaction at the requested intervals until such time as you delete it.

Interval The interval entry comprises two fields. The first accepts a positive value and the second can be switched between "Months" and "Days" by pressing the space-bar. These two fields determine how often HAC will enter the transaction on the account. To enter an automatic transaction every two weeks, for example, you would set these fields to 14 days. When the second field is set to "Months," the transaction will be entered on the same day in each appropriate month. For example, with a starting date of April 7 and an interval of 2 months, entries would be made on April 7, June 7, August 7, and so on.

The following examples should help to clarify the way in which the automatic transaction system works.

Example 1:

You have a salary of \$950 that is deposited into your checking account every two weeks. An entry to have HAC automatically enter these deposits might look like this:

Date	8/14/92
Detail	Salary - Acme Inc.
Amount	950.00 Credit
Number of entries	0
Interval	14 Days

As soon as you run HAC on or after August 14 an entry will be made in your checking account. The date field will then be amended to 8/28/92, the date on which the next entry would then be due.

Example 2:

You have made a purchase on an installment plan and your account is to be charged with \$152.75 on the 18th of each month for the next 4 months, starting on August 18th. A entry might be as follows:

Date	8/18/92
Detail	XYZ Inc. Installment
Amount	152.75 Debit
Number of entries	4
Interval	1 Months

On August 18, HAC will make the first entry and amend two fields in this record. The date will be adjusted to 9/18/92 and the number of entries will be decremented to 3. Similar amendment will be made of the following entries, until after the entry on November 18 HAC will note that no further entries are due and will delete this automatic transaction record.

LAST DAY OF MONTH ENTRIES

With the interval set to "Days" HAC just adds the appropriate number of days on to the date after each entry of the transaction. Similarly with dates from the 1st to the 27th and an interval set to "Months," the appropriate number of months are added each time (adjusting the year if necessary).

If the date entered is the 28th, 29th, 30th, or 31st when using monthly intervals HAC assumes that the transaction is to be entered on the last day of each month. For example, with the interval set to 1 month and a starting date of March 31, you will get entries on March 31, April 30, May 31, June 30, and so on.

VIEWING/AMENDING AUTOMATIC TRANSACTIONS

When you press F3 from the account display the line part way down the screen starting "Automatic transactions" also shows the total number of automatic transactions on file for this account. The center of the line initially shows "New," indicating that you can enter a new record. Press PgUp and PgDn to move through the list, viewing each record that is currently on file; the status line will show the record number you are viewing at any time.

You can amend any details you wish move moving to the appropriate field and entering the new value (if, for example, you are still having your salary paid into your bank account directly but you have just been given a raise). As soon as you press F10 to finish editing or PgUp or PgDn to move to another record, the amendments you have made will be accepted. Press Esc to abandon your changes if necessary.

HAC automatically deletes records once the requested number of entries have been made, but you can delete an entry manually if required. With automatic transactions set up for an indefinite period manual deletion is the only way in which they can be stopped. In either case, use PgUp and PgDn to locate the entry to delete, then press F4. You will be asked to confirm that you want to remove the entry.

VARIABLE AMOUNT ENTRIES

Sometimes a transaction is regularly entered on an account but the exact amount varies from one entry to the next. This might be the case, for example, where you are paid on the same day every month but the amount is dependent upon the hours you have worked, any bonus payments, and so on.

You can still have HAC remind you to enter such transactions by setting up an automatic transaction record with the amount field set to zero. You should still set the amount as a "Debit" or "Credit" as appropriate.

When you run HAC and a variable-amount automatic transaction is due you will see a data entry display requesting an amount. This display shows the account name, due date, and description so that you can enter the appropriate value. Once any and all such entries have been made, the main menu will appear.

It is possible that you do not have the amount of a transaction available at the exact time that the entry is due. If this is the case you can postpone entry by entering zero or pressing Esc when HAC requests the amount. The transaction will be held over until the next time you run HAC, at which point you will be reminded again.

Two other options are also available when HAC is requesting an amount. Pressing F3 will cause the entry to be skipped. For example, if you have a monthly transaction due to be entered on the 14th of each month and HAC is requesting the entry for 6/14/93, pressing F3 will cancel the entry for that date and advance the due date to 7/14/93. You will then be prompted as usual on or after July 14. Note that the "Number of entries" field is still decremented when you skip an entry (unless it is set to zero for unlimited entries).

You can also completely delete an automatic entry by pressing F4. You will be asked to confirm your request, then HAC will remove the automatic transaction to prevent any further prompts. This option is a quick way to remove an automatic transaction that will no longer be required, and saves you having to go to the editing routine to delete it.

8.
CONFIGURATION

=====

Configuration of HAC to your exact requirements is by way of one or more configuration files containing simple text. Use EDLIN or any other ASCII text editor to create a file named HAC.CFG in the same directory as HAC.EXE and HAC.HLP. HAC checks for this file at start-up and loads the configuration options listed in it if found. Note that HAC.CFG must be in the current default directory in order for HAC to locate it. Each option should be placed on a separate line in the file and text can be either upper or lower case.

PATH FOR DATA FILES

By default HAC expects to find its data files in the current default directory. You can change this with the line

```
DATA=C:\PATH\
```

where C:\PATH\ is the drive and directory path for the data files. Note that you must include a trailing "\" after a directory name.

As a simple example, on a two-drive system with no fixed disk you might want to keep the HAC program on drive A: and use drive B: purely for data to maximize storage space. You configuration file on drive A: should contain the line

```
DATA=B:\
```

to tell HAC where to look for (or create) data files.

PRINTER OUTPUT

HAC normally sends all printer output to the operating system device LPT1. You can redirect printer output to a different device or a disk file with the line

```
PRINT=path
```

where "path" is either a valid device name, such as "LPT2", or a drive path and/or filename. Note that device names should not be followed by a colon, so "PRINT=COM1" is acceptable, but "PRINT=COM1:" is not.

DISPLAY ATTRIBUTES

When run without a configuration file HAC is set up primarily for a monochrome display; this will also produce a readable display on a color monitor. To set the display to your own preferences include the configuration line

```
COLORS=ww,xx,yy,zz
```

where each letter pair represents a decimal number for each area of the display:

ww	The main display attribute
xx	Highlighted areas, borders & field markers
yy	Title lines & headings
zz	Top status line block

To obtain the value for each number add together the required foreground and background color from the following table:

Color	Foreground	Background
Black	0	0
Blue	1	16
Green	2	32
Cyan	3	48
Red	4	64
Magenta	5	80
Brown	6	96
Light gray	7	112
Dark gray	8	
Light blue	9	
Light green	10	
Light cyan	11	
Light red	12	
Light magenta	13	
Yellow	14	
White	15	

For example, to view the main text as green on black, highlighted areas as yellow on black, titles and headings as white on blue, and the status line block as light gray on black, you would use the following line:

```
COLORS=2,14,31,7
```


Attributes for monochrome displays can vary slightly depending on the type of display adapter, but the following values are the most usual.

Appearance	Value
Underlined	1
Normal text	7
Intense & underline	9
Intensified	15
Reverse	112

DATE FORMAT

By default HAC checks the operating system's COUNTRY setting and uses "mm/dd/yy" or "dd.mm.yy" for dates depending upon whether the country is set to American or British format conventions respectively.

You can force HAC to override the default setting and always use American format with the line

```
DATE=MDY
```

or to always use British format with the line

```
DATE=DMY
```

CURRENCY SYMBOL

A floating dollar sign is usually placed ahead of the account balance on the viewing screen and on the total figure for summary displays and print-outs.

You can change the currency symbol to any printable character with the CURRENCY configuration option. You should give the decimal ASCII code for the character you require. For example, the line

```
CURRENCY=156
```

will change the currency symbol to the British pounds-sterling symbol. You can also tell HAC not to use any currency symbol by assigning a value of zero.

Note that the same character is used for both the display and for printing. Some printers cannot print ASCII codes of 128 or above, or may need their configuration switches to be set for a particular character set in order to print the correct symbol. Check your printer's manual for details.

MULTIPLE CONFIGURATION FILES

Although by default HAC looks for the configuration file HAC.CFG, you can have any configuration file read by specifying its name on the command line you use to start HAC. If you do not explicitly specify a file extension, ".CFG" is assumed. For example, starting HAC with the command line

```
HAC MYCONFIG
```

causes HAC to search for a configuration file named MYCONFIG.CFG instead of the usual HAC.CFG. The specified file must exist in the current directory or on the path given in the command line.

The main reason for allowing more than one configuration file is to provide facilities for keeping more than one set of accounts. The suggested arrangement is outlined below.

From your HAC directory create a sub-directory for each set of accounts. These sub-directories will be used for the data files. Create a configuration file for each set of accounts, using a suitable name for ease of identification. These names could be initials of different users or even a single letter such as "P" for personal accounts and "B" for business accounts. Within each configuration file, put a suitable DATA line that sets the appropriate file path. Now all that is necessary is to specify which configuration is required when starting HAC. The following example should clarify the situation.

Directory structure:

```
C:\HAC
:   HAC.EXE           (Main program)
:   HAC.HLP           (On-line help file)
:   P.CFG             (Configuration files)
:   B.CFG
:
:-----PERSONAL     (Data sub-directories)
:
:-----BUSINESS
```

Contents of P.CFG:

```
DATA=C:\HAC\PERSONAL\
```

Contents of B.CFG:

```
DATA=C:\HAC\BUSINESS\
```

The files for each configuration can also contain other options as required. For example, different users may have different preferences for display colors or use an alternative printer port.

APPENDIX A.
DATA FILES

=====

HAC uses a file named ACSTAT.DAT to record the current status of all 26 accounts. This file contains the account names, account type, current balances, and so on.

Each account you open creates two files on disk. These are named "TRANS" and "AUTO" followed by the account identification and a ".DAT" extension. For example, when you create account Q you will see the files TRANSQ.DAT and AUTOQ.DAT appear in the directory. The former is used to hold all transactions entered in the account and will grow in size as you add transactions. The latter file contains the list of automatic transactions that are set up for the particular account. Note that this file can be of length zero if no automatic entries are currently in effect.

Note: If you should copy files from one sub-directory to another you should carry out the transfer using XCOPY, because COPY will not transfer zero-length files and you will get a "File not found" error when next running HAC.

APPENDIX B.
INFORMATION FOR PROGRAMMERS

=====

The Home Accounts System was developed using Borland's Turbo Pascal Professional 5.5. Source code is included on the distribution disk.

In order to modify HAC, or to understand the program fully, you will require a copy of Turbo Pascal Library, version 2.0. This is a freely distributable software development library for Turbo Pascal that was written by the same author as HAC. It provides many useful features for application programs. Your distributor of "Shareware" or public domain software that supplied this package should be able to provide you with a copy. (Note that version 1.0 of HAC was designed with Turbo Pascal Library 1.1. The current version of HAC requires the new version 2.0 library.)

The main program is contained within the file HAC.PAS. It is assumed that your compiler has all options set to their default values as described in Borland's handbooks for Turbo Pascal 5.5. The final compilation of HAC.EXE was done with the /\$D- switch from TPC to suppress debug information and make the EXE file smaller.

The file HELP.TXT is the ASCII source for the context-sensitive help system, and the HAC.HLP file is produced by running the text through the HELPCONV utility (part of Turbo Pascal Library).

Please feel free to use any of the source code for your own programs. If you are distributing software derived from HAC a note to that effect in your documentation would be appreciated.

APPENDIX C.
REVISION HISTORY

=====

VERSION 1.0, August 1992

HAC was developed to serve the author's need to maintain a record of various bank accounts. The aim of HAC was to give a simple method to keep track of balances and reconcile monthly bank statements.

VERSION 1.1, June 1993

The original version of HAC has now been in use for several months, and some minor revisions have been made to make certain operations simpler. Specifics can be found in the appropriate section of this manual.

When entering a transaction, version 1.0 would always offer the current system date. This has been modified so that when entering a series of transactions on the same account you will be presented with the last date you used. Also, the edit field now always starts on the date; in version 1.0 it started on the field below the date.

Another new feature is the use of the plus and minus keys to move forward or back one day at a time. This allows very convenient entry of a series of transactions with dates that are close. Note that in order to support this feature the date separator for British-format dates has been changed to a period (e.g. "23.06.93"). American-format dates are not affected by this change. Directly typed dates can now also be entered without the year; HAC will automatically default to the current year.

With variable-amount automatic transactions, version 1.0 allowed you to postpone entry of a due transaction. Version 1.1 provides two new options when an entry is due: You can skip the entry and advance the due date, or you can delete the automatic transaction entirely.

A floating dollar sign is now used on account balance displays and summary print-outs. A new CURRENCY option has been added to the configuration file to enable the symbol to be altered to any other character or to be disabled.

Some minor alterations to the editing layout have also been made to improve the alignment and appearance of data-entry screens.

APPENDIX D.
DISTRIBUTION POLICY

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This package is released for free distribution and use by individuals or businesses. My reasons for not charging a registration fee are fairly simple: I am not in a position to provide full support for any of the software I write. If you feel that you should make some sort of financial contribution for the software you use, then I suggest a donation of a few dollars to a charity.

Although there is no "official" support for this package, you are welcome to write with any ideas or suggestions. If you have any problems that you think are caused by a bug in the software, please feel free to write me and I will try to help (letters to England from the United States require 50 cents postage for the first half ounce). If you just want to pass on a short comment or let me know that you find the software useful, a picture-postcard from your home-town would be most welcome (40 cents postage).

Please pass on copies of this package to anyone who may find it useful.