

CASHAC - Cash Accounting from 6060Software

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PREFACE

In double-entry book-keeping, for every transaction one must ask 2 questions : “How is the transaction funded?” and “What is the transaction for?”. The answer to each of these questions identifies an Account in your books where the transaction is recorded. This idea that every transaction has a dual effect on your Accounts is the foundation of double entry book-keeping, where a transaction is applied to one account as a *debit* and to another account as a *credit*. But I know I am not alone in finding double-entry book-keeping confusing. A common cause of this confusion is to think of the debit and credit as a 'flow' of funds *from* the account debited *to* the account credited. It is easy to slip into this misconception without realising. In *Cashac*, in contrast to double-entry, I wanted to *wallow* in the idea that debits and credits represent flows. A payment, for example, is a flow of funds in the external world *from* your bank account *to* a counterparty such as your supermarket; and in parallel, it is an outflow from an internal 'pot' of virtual funds that you have privately set aside for groceries. So I set aside my rather sketchy knowledge of double-entry and started from scratch to build an accounting program from this premise, just to see where this led. And of course the result is basically double-entry book-keeping with a different vocabulary [and *of course* I ended up with the debits & credits the wrong way around, bah¹]. It seems to work - I use it for my domestic accounts. I hope you find it useful too.

Charlie Thomas
January 2012
February 2018

¹ If A owes money to B then in A's accounts this is a Liability, recorded as a credit balance, and in B's accounts it is an Asset, recorded as a debit balance. My bank statement is an extract from my bank's accounts; the fact that it [usually] shows a credit balance confirms that my account is a Liability for them, they owe me [my] money which I have deposited with them. In my own accounts using conventional double-entry book-keeping this should be shown as a *debit* balance. In *Cashac* this is shown as a credit balance which makes bank reconciliation more intuitive, although flying in the face of convention. I agree that the conventional approach is better, but you do need to get your head round your own assets being debits, ie the opposite of what your bank says.

1 ACCOUNTS

1.1 Summary

Type	Postings?	Balance?	Use
External	yes	yes	Show where in the outside world your money resides. Examples : individual bank accounts, store cards, credit cards, people who owe you or to whom you owe
Internal	yes	yes	show the types of activity on which your money actually comes from and (more interestingly) goes to. Examples : Gas, Electricity, Rent, Groceries, Salary, Pet Food, Nappies
Counterparty	yes	no	Show who pays you and whom you pay. Examples : Lloyds Bank, Sainsbury's, individual friends

You will generally have many instances of each type of Account, probably several hundred in the case of Counterparties. You may create (or amend) Accounts of any type at any time, either as a stand-alone activity, or in the course of entering Transactions.

A more detailed description of each account type follows.

1.2 External Accounts record where your money and/or your debts can be found in the outside world. The most basic External Account is 'hard cash', which records the amounts of notes and coin in your possession. Apart from this 'hard cash' account, each External Account is provided for you by a Counterparty, for example your bank. You may have more than one External Account from any Counterparty, for example your current and deposit accounts at your bank, or your personal and joint accounts, in which case these accounts are distinguished by 'Designations' (for example, = "current account" or "deposit account"). If the Account has a positive balance then the Counterparty owes this amount to you; if a negative balance then they owe you a negative amount, ie you owe them. Where a Counterparty owes you money, represented by a positive balance on an External Account, then the steps you need to take to retrieve this money can vary widely : if you have lent money to a dodgy acquaintance then you will need to work quite hard over possibly an extended period of time to persuade them to repay you, whereas if your bank owes you money then you can withdraw it at any time from a cash machine. You can use External Account Groups to distinguish between these types of asset (some examples below).

External Accounts correspond to Sales and Purchase ledgers in double-entry book-keeping. They could also at a stretch be used for Fixed Assets, although *Cashac* is really only meant for cash accounting.

1.3 Internal Accounts record the types of things you actually spend your money on, for example Rent, Gas, Groceries. Two types of Internal Account are distinguished : “Pots” and “Categories”. Account balances (on the Account Balances form) are calculated differently for these : for Categories, the balances only reflect movements within the current accounting Period, and there is no ‘brought forward’ figure from previous periods – this brought forward figure is instead automatically ‘washed’ against an individual Internal Account known as the Default Pot; Pots on the other hand reflect balances in the more conventional way, in that the current balance is built from the brought forward amount from previous period, plus the items in the current period.to date. This automatic washing facility can be switched off, in which case Categories are treated the same as Pots. Ideally your everyday spending should over time be slightly less than your income, so that the Default Pot will accumulate a positive balance – this is your ‘reserve’. Special income such as birthday presents which is not to be used for everyday expenditure should be recorded against an Internal Account which is a Pot rather than a Category, so that it is kept separate from one Period to the next.

Internal Accounts correspond to Nominal Ledger accounts in double-entry book-keeping, which are reported in the annual Profit & Loss statement before being cleared to the Reserves on the Balance Sheet. The ‘Default Pot’ in *Cashac* corresponds to the Balance Sheet Reserves.

1.4 Counterparty Accounts record where in the outside world your money comes from and goes to. For example, you will have instances of these for your employer, for the shops which you use regularly, and for the various utility companies who supply you (gas, electricity, water, local council, etc). You might also have a Counterparty Account entitled "Counterparty not specified" (or similar) for transactions where you are not interested in identifying the Counterparty, for example for Counterparties which you might only use once such as petrol stations.

Counterparty Accounts do not have balances, since you are not interested in how much money they have. You *will* of course be interested in amounts which you owe to a Counterparty, or which they owe you : these are recorded in an External Account for the Counterparty, rather than on the Counterparty Account itself.

1.5 [this paragraph now subsumed by 1.3]

1.6 Account Groups

Accounts may be grouped, and these groups may themselves be grouped. This hierarchy of groups and subgroups may be nested to any depth. *Cashac* reports group balances and movements as the sum of the balances & movements of the Accounts (and any subgroups) in the group; these accumulations are made by the Rebalance function. The hierarchy of Groups to which an Account belongs is referred to as the “**Path**” for that account (using this term in the same way as in Windows for files and folders). *Cashac* stores the account paths in an internal format to help speed up the Rebalance function; if you change the grouping hierarchy, for example by moving an Account from one Group to another, then the next Rebalance will include an extra step to ‘rebuild’ the account paths before accumulating the totals for the revised groups. This ‘rebuild paths’ function is time-consuming, so is only triggered when absolutely necessary, but you can force it via the Debug menu if you suspect that a software error has caused it to be omitted.

Suggested External Account Groups are

- o Hard cash (notes & coin)
- o Current accounts
- o Deposit/savings accounts
- o Credit cards
- o Store cards
- o Credit accounts (spending) - counterparties to whom I owe money
- o Credit accounts (income) - counterparties who owe me money

Suggested Category Groups might be

- o “Recurrent Income/Expenditure”
- o “Non-Recurrent Income”
- o “Non-Recurrent Expenditure / Projects”
- o “Energy” with accounts for Gas and Electricity,
- o “Holidays” (with accounts for each individual holiday or type of holiday)

Counterparties might be grouped according to their location (for example “London”, “Brighton”, “internet”)

It’s a very good idea to use Account Groups for Internal Accounts & External Accounts, and *Cashac* prompts you to do this for new accounts (although you can still opt to leave these accounts ungrouped).

1.7 Channels may be defined for each external account. These are the various routes via which money can enter or exit the account, for example “debit card”, “cheque”, “internet payment”. Channels are particularly useful for joint accounts, to allow separate reporting on withdrawals by the individual account holders. External Account postings can be filtered by Channel, so that for example you can view just your own cheques from your joint account.

1.8 “Postings” are the impact of transactions on accounts. For example a payment from my bank to my supermarket will generate within *Cashac* a posting debiting my bank, and a posting crediting my supermarket (and a posting for a Category such as “Food/Household” - more below).

2 TRANSACTIONS

2.1 Transaction types

Cashac recognises broadly 3 different transaction types as follows :

- o **Purchase/Payment** - where you receive goods or services from a Counterparty in exchange for a payment or promise of payment to them. The payment might be at the same time, in which case the transaction is a 'Cash Payment', or might be deferred, in which case the transaction is a 'Credit Purchase'. In either case an External Account is debited and a Counterparty credited ... For a Cash Payment the External Account debited is typically 'hard cash' or 'my bank account' or 'my credit card'. For a Credit Purchase the External Account is with the Counterparty themselves, and the debit balance there shows that you owe them money; in due course you will make a further transaction to pay off this debt (see "Transfer" below).
- o **Sale/Receipt** - where you receive money or a promise of money in return for goods or services which you have provided. The payment might be at the same time, in which case the transaction is a 'Cash Receipt', or might be deferred in which case the transaction is a 'Credit Sale'. In either case an External Account is credited and a Counterparty debited ... For a Cash Receipt the External Account credited is typically 'hard cash' or 'my bank account'. For a Credit Sale the External Account is with the Counterparty themselves, and the credit balance there shows that they owe you money; in due course they will make a further transaction to pay off this debt (see Transfer below).
- o **Transfer** - where you move money between your own accounts, either between External Accounts or between Internal Accounts. An obvious example of an External Transfer is where you deposit into or draw down from a savings account. In this example both accounts would typically have a positive balance. By contrast, an External Transfer into an account with a negative balance serves to pay off your debts to a Counterparty, for example paying your credit card bill or your store card bill, or where your counterparties pay off their debts to you, for example your friend repays you their share for the group night out last month. Internal Account transfers are covered below under "Budgetting".

2.2 It is important to appreciate that not all "payments" (in the most general sense, that you or I might use the term day-to-day) are Purchase/Payment transactions (in *Cashac*), and conversely neither are all Purchase/Payment transactions "payments". Similarly "receipts" and Sale/Receipt transactions are also not wholly equivalent. The following examples illustrate how a "payment" can sometimes be a Purchase/Payment transaction, and sometimes an External Transfer :

- (a) where I pay hard cash to my newsagent for my daily newspaper;
- (b) where I pay the supermarket for my groceries using my bank debit card;
- (c) where I pay a mail order supplier using my credit card;
- (d) where I buy goods from a department store using my store card ... but then at the end of the month I receive the store card statement which I also "pay" - it looks as if I might be "paying" twice here!

- (e) where I buy building supplies ‘on account’ from the builders merchant ... the assistant asks “How will you pay : Cash or Account?” to which I reply “Account”; it stretches the term too far to describe this as “payment” - instead I am ‘charging’ the transaction to my account, thereby *deferring* payment until the end of the month. And if instead I reply “Cash” this does not commit me to paying in hard cash, a Debit Card or Credit Card still counts as ‘cash’ in this context.

The examples above show a spectrum : at one end the “payment” is clearly a Purchase transaction; at the other end the “payment” is clearly *not* a Purchase transaction, but is instead a subsequent External Transfer, when I *pay* the credit card bill, or storecard bill, or builders merchant’s account.

2.3 As well as some Purchase/Payment transactions being clearly not *payments* as in 2.2(e) above, the converse is also the case, ie some are clearly not *purchases*, for example I give my god-daughter a cheque for Christmas, which clearly is a ‘payment’ and not a ‘purchase’.

2.4 So the rather clumsy double-barrelled way of referring to the transaction type as a “Payment/Purchase” seems unavoidable (and similarly for “Sale/Receipt”).

2.5 Transaction “**templates**” allow you to enter new transactions based on existing transactions. Only the date in the new transaction must be entered, although any of the other fields may be amended. This is easier than entering a new transaction entirely from scratch.

Table 1 – Summary of transaction types

Ref	Txn type name	Account type			Use
		Extl	Intl	Cpty	
1	Cash Payment (outright)	dr	dr	cr	Outright cash payments in exchange for goods/services, for example via hard cash, cheque, or credit card. Also cash given as gifts where no goods/services are received in exchange.
	Credit Purchase	dr	dr	cr	Purchases made on credit granted by the supplier (not credit card purchases, which count as Cash Payments). These are a special case of Cash Payment, where the Counterparty is also the Account Provider of the External Account used to pay for the transaction.
2	Cash Receipt (outright)	cr	cr	dr	Outright cash payments received, either in exchange for goods/services or as gifts.
	Credit Sale	cr	cr	dr	Sales made to customers where you grant them credit. A special case of Cash Receipts, as above.
3	External Transfer	dr + cr	-	-	Transfers between your External Accounts, for example, drawing down from your savings, or paying your credit card bill. Also settlement (repayment) of outstanding credit, either by you to your suppliers, or by your customers to you.
	Internal Transfer	-	dr + cr	-	Transfers between your Internal Accounts, to allocate budgets at the start of a budget period, and to clear down budget variances at the end of the budget period (the 'Sweep' function helps with this).

Annex D gives examples of typical transactions and the accounts that are impacted.

3 GETTING STARTED

The following instructions tell you how to populate a completely empty database. Follow the steps in sequence :

- 0 Enter details of your base currency, for example GBP for sterling, USD for US dollars, EUR for euro, etc. For the time being it is assumed that all your transactions and accounts will be in this currency - see below under “Currencies” for multi-currency work.

er, that’s it : you are now ready to enter Transactions. Details of External Accounts, Internal Accounts, Counterparties, Categories, can all be entered ‘on the fly’ as needed. But of course, this makes input of the first few transactions rather onerous, so the following additional preparatory steps are recommended ...

- 1 Create a new External Account for 'hard cash'. The Counterparty who supplies this account should be blank.
- 2 ~~Create a new Internal Account, entitled “Default Pot” or similar~~ [Cashac now does this automatically].
- 3 Enter details of the Counterparty(ies) who provide your bank accounts, ie the names of the bank(s). Check the boxes for both “payer” and “payee”.
- 4 Create new External Account(s) for your bank account(s) and credit cards. If you need to specify an opening balance, enter a subsequent Sale/Receipt transaction for this.
- 5 ~~Enter details of Counterparties with whom you have a credit relationship, ie your store cards, any customers to whom you grant credit, and any suppliers who grant you credit. Then enter the corresponding External Accounts.~~

[No need for this step any more - Cashac will do this on the fly as part of transaction input as and when you need to enter a Credit Purchase/Sale]

- 6 Enter details of the main Categories you envisage using for Spending and Income. Don’t worry if the list is nowhere near complete at this stage. It’s a good strategy to make the Categories as specific as possible, for example relating to a *particular* holiday rather than to Holidays in general; you can use the Account Groups facility at a later stage to provide the levels of aggregation which you need.
- 7 Don't worry about entering details of Counterparties with whom you you make or receive *cash* payments (as distinct from *credit* purchases/sales) - these can be entered at the same time as transactions.
- 9 You are now ready to start entering Transactions – see below. At the same time you can enter any additional Counterparties and or Categories as needed. Where you are prompted for an Internal Account use the “Default Pot” created in step 2 above (see “Budgetting” below).

4 ENTERING TRANSACTIONS

4.1 Retain your receipts! Don't just stuff them in your pocket or in the carrier bag with your purchases, but fold them up like an anal retentive and slip them into your wallet/purse. Dutifully complete cheque stubs and credit stubs with date, amount, counterparty, and a note as to what the payment/receipt was for (eg "shoes", "birthday present from x", ...). Ideally every day, and certainly no less frequently than every week, data-capture these retained receipts/stubs as transactions in *Cashac*.

4.2 Every Purchase/Payment or Sale/Receipt has 2 dates : the '**actual transaction date**' and the '**posting date**'. These are specified as part of transaction input (either one may be omitted, in which case it is automatically derived from the other). The 'actual transaction date' is when the Category is posted; the 'posting date' is when the External Account and Counterparty are posted. The posting date may need to be later than the actual transaction date because of delays in the banking system in settling payments across bank accounts, particularly for transactions on or immediately before weekends and holidays - for example cheques settle 3 days after they are presented. Conversely, it is useful to allow a posting date *earlier* than the actual transaction date, where the transaction date refers to a renewal deadline that is repeated every year (for example for the car's MOT), prior to which work must be done and paid for (on the posting date). If transactions are entered as they occur (using their receipts as in 4.1 above) then only the actual transaction date will be entered, as the posting date will not be known in advance. If transactions are entered in retrospect from bank statements then it is the posting date and not the actual transaction date that should be entered, and in subsequent years the fact that this date is shown as the Posting Date and not the Actual Transaction Date this will alert you to the possibility that the actual transaction might have occurred some days previously to that date.

The use of 'posting dates' means that the aggregate balance across all Internal Accounts on any particular date might sometimes not equal that across all External Accounts, because of transactions whose 'transaction date' is on/before the balance date, but whose 'posting date' is after the balance date (or conversely). The transaction dates are said to "**straddle**" the date in question. In traditional double-entry book-keeping this is heresy : it effectively means that the debits and credits do not balance for the period between the transaction date and the posting date. But the benefit of greatly simplified account reconciliation (see below) I think is worth it. In *Cashac* straddles can be obstructive – for example accounting periods cannot start or end on a date with a straddle – but the obstruction is easily resolved using a facility on the Transaction Details enquiry form, which splits the straddling transaction into 2 separate transactions one for each date.

4.4 The transaction **amount** must be entered without a sign (ie by implication positive). The position of the amount box on the Transaction Input forms, before any of the account details for the transaction, may be thought eccentric, and is worth explaining : I wanted to give the amount more prominence as a reminder of the importance and usefulness of the 'search for transaction by amount' function. If you 'lose' a transaction after you have entered it, for example because you inadvertently entered a wrong account or wrong date, then searching for it by amount is generally the easiest way of finding it.

4.5 If a transaction is **cancelled** then its postings remain on record against the relevant Accounts but with a zero value; the original amount of the transaction can still be viewed on the Transaction Details enquiry form. This facility is useful in reconciling payments (in particular, cheques) on External Accounts which have persistently failed to be presented : in this circumstance the transaction is cancelled, and if/when it eventually appears on the external account statement it can be 'uncancelled' and given the appropriate posting date.

4.6 The ‘**Select Account**’ dialog box, to enter an External Account or Counterparty or Category, is automatically displayed when the relevant field is clicked with the mouse.

Tip : When creating new Category Accounts, concentrate on what the transaction was for, ie what goods/services were exchanged, rather than whether it was justified or whether you could afford it (which are tasks for a later stage : Internal Account Reconciliation).

4.7 The Category for a transaction can often be derived from the Counterparty. When you select a Counterparty, *Cashac* automatically displays a list of **Counterparty-Categories**, ie previously used Categories for this Counterparty (without waiting for you to click the Category field). This will generally be quicker to pick from than a list of all Categories. You can of course opt not to pick from this list but to enter a Category that has not been used before for this Counterparty, or even to enter details of a completely new Category. If the Counterparty-Category list comprises just a single item then *Cashac* automatically populates the Category field with this item. You can override this by clicking the Category field.

4.8 The “Repeat” tab on the Transaction Input form may be used to specify that a transaction should automatically repeat, for example for Standing Orders or Direct Debits from your bank account. Instances of **repeating transactions** (“Repeaters”) are automatically generated up to (and including) the first instance in the future. Each instance is treated as a transaction in its own right, and can be amended or deleted independently of other instances and of the master details. You can specify how many instances you want, or when the repeat is to finish. Alternatively you can leave the repeater open-ended so that instances will be generated indefinitely; this may be terminated subsequently by marking the master details as “inactive”. If an instance of an active Repeater is *deleted*, then it will be regenerated automatically on the next Rebalance - if you want a gap in the repeat-sequence then you should *cancel* the relevant instance rather than delete it (or make the Repeater inactive). A stand-alone (ie non-repeating) transaction may easily be converted into a repeater via the “Repeat” option on the Transaction Details form : this assumes that the transaction displayed is the first instance, and that the repeat interval is monthly.

Tip : Make as much use of repeating transactions as possible, and not just for your standing orders and direct debits. For example, you can set up an annual repeater for your car service. If you do not know the transaction amount in advance specify a zero amount.

4.9 When entering a repeating transaction an option is available to enter a **Reminder**, which will automatically pop up the specified number of days before the transaction date. This is especially useful for annual transactions such as servicing the car.

4.10 [*Cashback - this paragraph has moved to Section 4a below*]

4.11 [*Batches -this paragraph has moved to Section 4a below*]

4.12 When entering payments or receipts, *Cashac* warns if you have an External Account with the relevant Counterparty which you are *not* using for this transaction, ie you have a credit relationship with the counterparty which you are not using in this transaction. Some types of credit relationship are easy to bypass inadvertently, for example if you use this method to account for your energy usage, or for your salary. This warning is for information only : for example, you might still want to use cash in a store even though you have a store-card for that store. If the warning starts to bug you then close the External Account for this Counterparty (you can always reopen it later).

4.13 [*Batches - this paragraph has moved to Section 4a below*]

4a BATCHES

4a.1 Transactions may be batched together as you input them. A separate tab on the Transaction Input form exists for this. The Postings List form and the Transaction Details form both show whether the transaction is in a batch (on the former this is a letter “B”, on the latter a separate button), each with a facility to view the batch.

4a.2 Batches are identified using the transaction id of the first transaction in the batch.

4a.3 A typical application for a batch is where you deposit several cheques into your bank account. In your own accounts (ie in *Cashac*) you need to record each cheque as a separate transaction (since a different Counterparty or Category will apply for each), even though at the bank this is a single transaction (with a single credit slip). By using a batch, these separate transactions will be grouped together on the Postings form, and these multiple postings may then be selected and their total amount displayed, to aid their reconciliation to the single line on the bank statement.

4a.4 Some transactions are automatically batched by *Cashac*, as follows :

- o Cashback
- o Splits
- o FX

For each of these a separate tab exists on the Transaction Details form, and in each case *Cashac* automatically creates a batch. Each one is covered in more detail below (FX in the "Currencies" section).

4a.5 Cashback - a Cashback transaction can be entered at the same time as the underlying purchase transaction. ‘Cashback’ is a facility offered by most supermarkets whereby you can overpay for goods using your debit card, and they refund the overpayment in cash. Cashback data-entry is linked to the underlying purchase so that common fields (eg counterparty, date) do not need to be entered again; but once entered, the two transactions are linked by placing them both in the same batch. A transaction reference of “Cashback” is automatically added. The Cashback facility in *Cashac* can also be used in reverse, ie to enter a negative Cashback amount, for example where you pay for a meal using your credit- or debit-card, and pay the tip using cash.

4a.6 Splits - a single Payment/Purchase transaction can be split between 2 Categories. For example, when I am at the farm shop I buy layers pellets for the hens, and groceries, each of which I Categorise separately in *Cashac*. In particular the Splits facility is used to record VAT (see below).

4a.7 VAT - If you are registered for Value Added Tax then (a) you must include VAT on your Sales, which you accumulate from day to day and pay over periodically (typically quarterly) to the tax office, and (b) your Purchases already include VAT added by your suppliers, which you may offset against the VAT in (a). The Split facility (see above) is used to record VAT. You should create Categories for “VAT on Purchases” and “VAT on Sales”. Suppose that you purchase meat for £120, of which £20 is VAT. Then this purchase should be Split between Categories “Meat” (£100) and “VAT on Purchases” (£20). Similarly for sales. Over time a negative balance will accumulate on Category “VAT on Purchases”, and a positive balance on “VAT on Sales”. Each quarter the balances on these 2 VAT Categories should be swept to a 3rd new VAT Category “VAT Return” [or similar]. If the resulting balance on “VAT Return” is > 0 then you will need to pay this over to the tax office, recorded in *Cashac* as a Purchase against Category “VAT Return”, thereby clearing the balance on this Category back to zero. Conversely if the resulting balance on “VAT Return” is < 0 then the tax office should reimburse you, recorded in *Cashac* as a Sale against this Category, again clearing its balance back to zero.

5 BALANCES

5.1 Balances are reported for External Accounts (and Groups of accounts) and for Internal Accounts (and Groups), but not for Counterparties.

5.2 Balances are reported on the **Accounts Balances/Movements form** (available from the main menu), by pressing the “Show Values” button there. This form shows account balances on 2 specified dates (ie ‘Brought Forward’ and ‘Carried Forward’ balances respectively), and movements for the **Period** between these dates. This form allows the Period to be changed; the Period can also be changed from the main Control form.

5.3 Account balances and movements, as reported on the aboveform, are generated by the **"Rebalance"** function. This function also generates instances of repeating transactions and associated reminders, and makes accounts dormant or undormant depending on when they were last posted. A Rebalance becomes necessary after a transaction is input, amended or deleted, if an Account is created or deleted, or if an Account is added to or removed from an Account Group. The Rebalance function is automatically invoked (if required) before displaying account balances; but it is *not* automatically invoked each time it becomes required, because rebalancing is a relatively slow process. *Cashac* prompts if a Rebalance is outstanding, and you may invoke it manually from the main menu as required.

5.4 When you create new External or Internal Accounts, you specify whether you expect the balance normally to be less than, equal to, or greater than zero (or a combination). Once balances have been calculated, the software then warns if the Account balance is out of range, via "!" on the Account balances list.

5.5 Balances are available for a single account at a time on the Postings Form in ‘statement view’, in the form of a running balance with each posting. These running balances are much quicker to calculate than the balances/movements on the Balances form.

5.6 For Internal Accounts which are Categories, the ‘brought forward’ total of pre-period items is always zero, having been automatically diverted (“washed”) to the Default Pot. This is because the total amount spent on individual Categories over all previous periods is of less interest than whether the aggregate across all Categories was more or less than aggregate income.

6 RECONCILIATION

6.1 You will need to ‘reconcile’ your bank statements, credit card bills, etc to your own records. This is important, although it’s a chore. It provides independent confirmation that both you and your bank have correctly recorded transactions for the account and period in question, as well as highlighting any irregular or fraudulent transactions on your external accounts.

6.2 The steps are as follows :

- (i) Make sure that you have entered all known transactions to *Cashac*, for example, from receipts, cheque book stubs, email confirmations. It’s best if you do this little and often, ideally daily.
- (ii) Use *Cashac* to list the postings for the relevant External Account. Use the “Reconcile Posting” function to check off each posting on screen that also appears on the bank statement (to speed things up you can use Options to switch off the screen refresh between each one). Use a pencil to check these items off on the statement as well. Ideally this should be all of them, fat chance ...
- (iii) External Account postings in *Cashac* which are dated within the period of the statement but do not appear on the statement, ie not marked as “reconciled” from step (ii), have probably been delayed for some reason, for example, cheques that have not yet been presented for payment. Update the transaction details either to enter a ‘posting date’ that is 1 month (say) ahead, or to cancel the transaction (it can if necessary be uncanceled later).
- (iv) For any statement items without a pencil mark after (ii), check that they are OK (for example, that they are not fraudulent), and if so enter matching transaction details for the relevant date - enter this date as the ‘posting date’ not the ‘transaction date’. [If they are not OK you will still need to enter matching back-dated details, but once the bank has resolved the problem an equal & opposite transaction can be entered later].
- (v) Now switch to ‘Statement View’ on the Postings form : the running balance for the last posting marked as “reconciled” should now match the ‘carry forward’ balance on the statement - if so use the “Reconcile Balance” function for this posting. This function creates a dummy one-sided ‘posting’ for this account, date and amount : the amount of this ‘posting’ is the expected running balance. When *Cashac* displays a posting list and encounters a balance reconciliation ‘posting’, it checks that the posting amount matches the running balance and if so displays “Balance Reconciled” (suitably abbreviated); if a mismatch is found then the actual running balance is annotated with the expected running balance together with a “?” .
- (vi) *Cashac* protects reconciled balances : if you enter a transaction for a past date that would change a reconciled balance then *Cashac* will warn of this and seek your confirmation before allowing the input.

6.3 Do not attempt to reconcile your Internal Accounts until you have reconciled all your External Accounts for the period in question. Reconciliation of your Internal Accounts is where you agonise over whether you could afford your expenditure and how you will make savings in the future. For example, the balance on the Internal Account Group “Recurrent Income / Expenditure”) should be positive - if not you are over-spending, and will need to make good the shortfall via an Internal Transfer from somewhere (for example from an Internal Account “Reserves”).

7 BUDGETS

The steps are as follows :

- (i) Decide on a budget ‘period’, for example annual, and a monitoring ‘interval’, for example monthly. It may be that income and expenditure are monitored at different intervals (eg monthly vs weekly).
- (ii) Each Category can be budgetted separately, or budgets can be assigned at Category Group level. The following assumes budgetting per individual Category. Budgetting at Group level is covered later.
- (iii) You will need a single Pot to act as a ‘washing account’, whose balance will automatically end up at or near zero at the end of the budget period. You should create a Pot especially for this purpose.
- (iv) You must decide what the budget amount is for each spending Category over the budget period, for example, what your annual spend on Gas might be. You then transfer this amount from your Budget Washing Account into the relevant Category in instalments at the start of each monitoring interval, for example, a monthly allowance for Gas.
- (v) In addition, you must estimate what your income will be over the period, and transfer this amount in instalments in the other direction, *from* your income Categories *to* your Budget Washing Account.
- (vi) At the end of the budgetting period the balance of the Budget Washing Account should be at or near zero, reflecting the fact that your budget should balance, and in particular that expenditure should not exceed income. If you plan not to spend all your income in the period then you should include a budget transfer from your washing account to a Pot for “Savings” or similar, so as not to leave the unspent funds on your washing account.
- (vii) At the end of each *monitoring* period (eg monthly) the balance on each Category should also be at or near zero, reflecting your successful adherence to your budgets. This is what you should check often and agonise over. Categories with a negative balance reflect over-budget spending, or under-budget income.
- (viii) If you wish to budget at Category Group level, then the budget for the Group must be transferred to a Category within the Group. It is probably clearest to create a new Pot within the Group especially for this, rather than to use any of the existing Categories.
- (ix) At the end of the budget period, assuming that you have successfully stuck to your budgets, the balances on your spending and income Categories will be zero or small positive.
- (x) At the start of a new Budget period, you will see that the residual balances from the end of the previous period have disappeared, leaving only the balances arising from your budget transfers ready for the new period. What has happened? This is a consequence of the special processing described in 5.6 above, which ‘washes’ pre-period Category balances to the Default Pot. Categories at the lowest level will not mix spending and income, but will be either only spending (eg Gas) or only income (eg Salary). Without this special feature, Category balances would grow

inexorably from one period to the next until eventually they would trigger an 'arithmetic overflow' error in the software. If your budget has not changed since the previous period then you need do nothing. If it has changed then you should either enter Internal Account transfers in respect of the difference, or enter transfers to undo the previous period budget, followed by a new set of transfers for the new budget.

8 CURRENCIES

8.1 *Cashac* supports multi-currency accounting.

8.2 The first action for an empty database is to enter details of the first currency, which is the “base currency”. The base currency is distinguished from other currencies for the following reasons:

(i) All exchange rates are expressed by reference to the base currency : an exchange rate is the amount of foreign currency that corresponds to one unit of base currency.

(ii) *Cashac* internal accounting, ie for Pots and Categories, is denominated only in the base currency (more on this below).

8.3 External Accounts are each in a single specified currency. The account may only be posted in its own currency. External Account Groups are also single-currency.

Sometimes it may seem that an External Account is multi-currency. For example I can use my credit card in mainland Europe for euro purchases, as well as at home in sterling. In *Cashac* you need to record a credit card used in this way as 2 separate accounts, for EUR and GBP respectively (the Counterparty with whom the accounts are held will of course be the same, ie the credit card company). At the time of making purchases, only the “credit card - euro” External Account is posted. When the credit card bill is received, you will see that each purchase has been ‘converted’ to GBP, having triggered an FX transaction by the credit card company at its sell rate for that day. Purchases made on different days, and sometimes even at different times on the same day, will use *different* exchange rates. You must enter these FX transactions into *Cashac* (one for *each* EUR purchase billed). This will clear down the “credit card - euro” account to zero, transferring the amounts owing (after currency conversion) to the “credit card - sterling” account. See Annex C “Transaction Examples” for an example. This “credit card - sterling” account is in turn cleared to zero in the normal way, ie when (if) you pay off the bill by transferring GBP to it from your bank account.

8.4 Internal Accounts (Pots / Categories) are always denominated in the base currency. A foreign currency payment or receipt cannot be posted to these accounts in its native currency - instead *Cashac* posts the base currency “value” of the transaction to these accounts. This value is calculated automatically from the transaction amount and the relevant ‘mid-market’ exchange rate on the transaction date. If no exchange rate is held by *Cashac* for the transaction date then *Cashac* will look for an earlier rate. If *Cashac* cannot find an exchange rate for this currency on or before the transaction date then the transaction input will be disallowed.

8.5 Counterparties are not currency-specific, so that any Counterparty may be posted in any currency. For example, when you obtain supplies of foreign currency from your bank prior to a trip abroad, *Cashac* will post your bank in the base currency and also in the foreign currency as a result of the FX transaction.

8.6 For any foreign currency, *Cashac* ideally stores an exchange rate for *each day* on which there are transactions in that currency. These rates are (ideally) ‘mid market’ rates, ie *different* from the rate at which your bank either sells foreign currency to you (their “sell-rate”) or buys it back off you (their “buy-rate”). The mid-market rate on any day is mid-way between the best buy-rates and sell-rates on that day, averaged across many FX providers. Mid-market rates for past days are easily found on the internet; failing this you can derive your own by taking the average of your bank’s buy-rate and sell-

rate for the relevant day; failing this you can use your bank's sell rate, but only as a last resort. Banks make money out of FX transactions not only by charging a commission, but also from the 'spread' between their buy- and sell-rates (and commission-free FX is only possible by using wider spreads, so is not necessarily cheaper for you). By using mid-market rates to value your transactions rather than the banks' own rates, you can identify the cost of FX separately from the cost of goods purchased abroad; if you use the bank's own sell-rate as a last resort here it will seem as though foreign prices are poorer value for money higher than they really are.

8.7 A Foreign Exchange ("FX") transaction is a payment in one currency twinned with a receipt in a different currency. *Cashac* provides a separate input form for FX; once input the FX transaction is stored as a separate payment and receipt, both automatically placed in the same batch.

For example, I buy 325 euros cash from my bank at their sell-rate of 1.0864, for which I pay $325 / 1.0864 = 299.15$ GBP

(i) Payment : debit External Account = "my bank account", credit Counterparty "my bank", debit Category = "Cost of FX", in each case for the amount 299.15 GBP.

(ii) Receipt : credit External Account "Hard Cash - Euros", and debit Counterparty = "my bank", with the amount 325 EUR. Credit the same Category as above with the *value* of this transaction using the mid-market rate for that day which was 1.14882, giving $325 / 1.14882 = 282.90$ GBP.

The net effect on the Category "Cost of FX" is $282.90 - 299.15 = -16.25$ GBP, which is the cost to me of this FX transaction. Notice that no commission was involved, the cost is hidden in the bank's sell-rate (the FX input form allows for commission as well, in which case a 2nd Payment/Purchase transaction is generated to my bank in respect of the commission amount).

8.8 Account valuation - In single-currency accounting *Cashac* ensures that the total balance across all Internal Accounts is the same as the total balance across all External Accounts*. In multi-currency accounting the value of your foreign currency account balances fluctuates day-by-day as the mid-market exchange rates fluctuate. The "Account Values" function in *Cashac* enables you to resynchronise your Internal Accounts so that their total balance once again matches the total value (using current exchange rates) of your External Accounts. This should be done at least annually. An adjustment posting is generated against your Internal Accounts with no impact on any External Account - this represents your FX Gain or Loss as a result of exchange rate fluctuations since the accounts were last synchronised.

* The only exception to this is where a payment or receipt 'straddles' the balance date, ie its 'actual transaction date' (when the Internal Account is posted) is before or on the balance date, but a 'posting date' (when the External Account is posted) has been specified for it which is after the balance date. The Account Values function is not available if such a straddle is found. To get round this the straddling transaction must be split into 2 separate transactions, one each side of the year-end. A facility to do this automatically is available on the Transaction Details form.

9 SWEEP

- o The 'Sweep' function automatically generates a transaction or set of transactions to clear the balance on one or more accounts to zero.
- o Sweep may be invoked either for an individual Account or for a Group of Accounts. The function is available on the Balances form (for Accounts or Groups) and on the Postings form (for individual Accounts).
- o When invoked for a Group of Accounts, then every account in the Group, *and every account in any subgroups*, is swept individually, with one Sweep transaction per Account. A unique reference for the Sweep as a whole is included in the 'Reference' and 'Description' fields in each transaction, for use by the 'Un sweep' function.
- o Sweep may be invoked for Internal Accounts or for External Accounts. For Internal Accounts, the sweep transaction is an Internal Transfer to a second specified Internal Account. For External Accounts the sweep transaction can be an External Transfer (to a second External Account) or a Payment/Receipt (to/from a Counterparty).
- o Sweep copes with negative balances as well as positive - the automatically-generated transactions are simply in the opposite direction.
- o The 'Un sweep' function automatically undoes a Sweep by deleting all the related transactions that were in the original sweep. It is invoked from the Postings form by selecting the 'delete' option for a Sweep posting - you can opt either to delete just the selected posting, or the entire sweep.
- o In previous versions of *Cashac*, Sweep was used on Internal Accounts, to clear down accounts at year end to a single Internal Account (this is equivalent to clearing down Profit & Loss accounts in double-entry book-keeping). But from version 2.11.00 (May 2015) this clear-down is automatic (see 7(x)).
- o Sweep may be used on External Accounts for example to clear down monthly balances on the "Notes and Coin" account in respect of spending that has not been itemised. The sweep transaction would be a payment to a Counterparty "Not specified" or similar, with an Internal Account of "Uncategorised cash spending" or similar.

10 ARCHIVING

10.1 After you have used *Cashac* for a while (probably a few years) the volume of transactions and postings on the database will cause the response time of the program to be significantly impaired. The Archive function allows you to strip out old transactions and postings to resolve this. The ‘brought forward’ balances of the Accounts are automatically updated to reflect the archived postings.

[As an indication of performance, I currently (March 2012) have about 17500 transactions and 63000 postings accumulated over about 10 years, and performance is fine with no need to archive].

[Update November 2018 : I had 30000 transactions and 82000 postings; the database size was 53MB and I did not want this to grow any bigger so I archived about half the transactions. In addition the Counterparty Select function was too slow, taking about 10s in Win XP to find one out of about 2300 counterparties by typing in the first few characters of its name (the same selection in Win 7 takes about 3s), so I introduced a Smarter vs Faster option on the Select Account form].

10.2 Use the menu options “Transactions | Journal | First” to see what will be archived.

10.3 The Archive function automatically makes a safe copy of the database, and also of the current version of CASHAC.EXE, since future versions of *Cashac* will not necessarily be compatible with your old data - but it is wise to supplement these with your own backup copies immediately before the archive.

10.4 Archive relies on ‘auto-wash’ ...

10.5 With *Cashac* versions 2.nn.nn, ie using the Firebird database, the database size on disk will not be reduced by the Archive, although performance will improve. The space released by the Archive is held by Firebird and used for subsequent additions to the database, so that the database size on disk will remain the same until this space is used up.

Archive should not change the figures in the accounts – the data being archived is already probably several years old, and any changes to it will have a knock-on effect on all subsequent years, so must be avoided. So for example, it is **not** a requirement that FX gain/loss as at the archive date is posted in order for the archive to proceed.

11 TROUBLESHOOTING

11.0 Use the “Refresh” function if a list is unexpectedly empty, for example an account with no postings.

11.1 If a transaction or posting is not listed where you expect it, search for it by amount - it may have been entered for the wrong account.

11.2 If an Account or Counterparty is not listed where you expect it, check that the filter is set to “all” so that all accounts / counterparties are listed (not just those active in the specified period).

11.3 If in doubt it is worth running the *Cashac* Database Check function. This reports a variety of database integrity errors, some of which can be repaired automatically using the Database Repair function, and others which you must repair yourself.

11.4 The **Debug menu** includes tools that will help if certain types of software error, that have proved persistent in the past, re-occur. These tools will only be of benefit in certain specific error situations, but they will not cause damage if run at other times.

11.5 If all else fails, I will be happy to help, email me (address on my website). Include “Cashac” in the email title so that I can distinguish your email from the tsunami of spam. If I do not reply within a few days please try again, my (ie Google's) spam filters are draconian and not very sophisticated.

12 MISCELLANEOUS

12.1 There's no printing facility in *Cashac* – sorry. The 'Quick Reports' facility in Delphi (my development platform of choice) stopped working for me on transition to Windows XP. But if you have access to a spreadsheet, eg Excel, then printing can be simply achieved by exporting (via the clipboard) from *Cashac* to the spreadsheet, and printing from there.

12.2 There's no online help in *Cashac* – sorry again. I have not had time to develop this. I hope that this guide helps at least in part to remedy this omission.

12.3 *Cashac* has been designed to make inputting (particularly of transactions) as streamlined as possible. Among the special features which assist are two which deserve some explanation here :

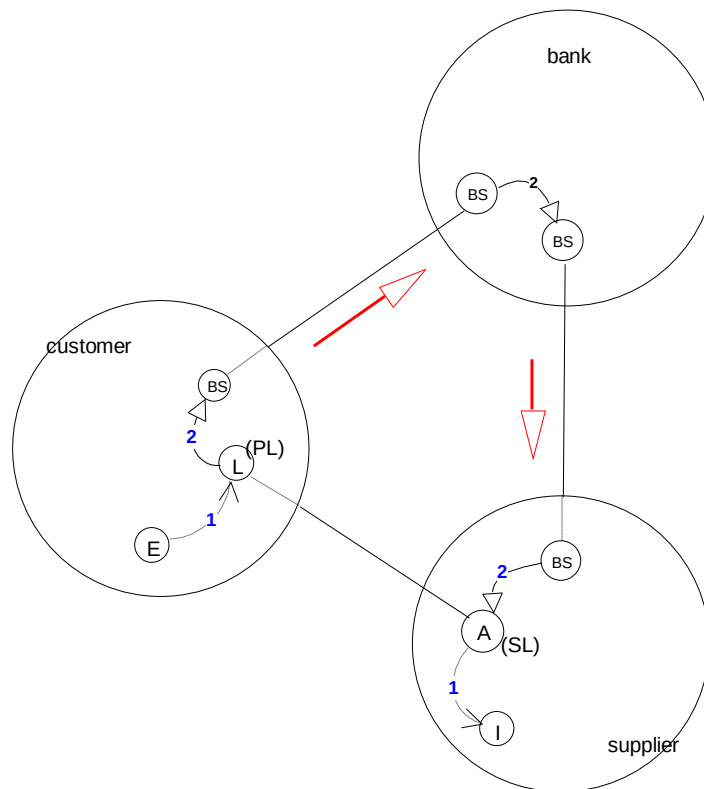
(i) **Flash Messages** are messages for information only that automatically disappear after a short time on screen. You do not have to wait for the message to disappear before continuing with your work. You can configure how long the messages appear for - ½ second is recommended for experienced users. The default is 1 ½ seconds.

(ii) **One-Click Selection** allows you to select items from a list with a single mouse click, instead of the more usual double-click. This makes selection lists more 'highly-strung'. By default this facility is switched off.

12.4 Making Tax Digital (MTD) (aagh) – In the UK, HMRC say that from April 2019 special software must be used to file VAT Returns, rather than simply manually entering the figures over the internet on the appropriate HMRC web page. One way to do this is to prepare the VAT Return on a spreadsheet, and then send it to HMRC via special 'bridging software' which HMRC claim will be easily (although not necessarily "freely") available. HMRC stipulate that your spreadsheet must be populated with figures transferred from your accounting software (eg *Cashac*) via a 'digital link', and in particular must not be rekeyed manually. They say explicitly (in VAT Notice 700/22) "The use of 'cut and paste' does not constitute a digital link", but (again, explicitly) they do allow "CSV import and export". Accordingly a CSV Export facility is provided in *Cashac* (on the Balances/Movements form) for digital linking to HMRC via a spreadsheet.

Charlie Thomas
6o6oSoftware
September 2015
December 2016
January 2019

Annex A - Double-entry book-keeping



Key

Txn 1 : 'Supplier' sells on credit to 'Customer'

Txn 2 : Customer pays Supplier

Red arrows = msg flow for Txn 2

Accounting arrows in direction debit-credit

A/L = Asset / Liability on Balance Sheet

BS = Balance Sheet (either Asset or Liability depending on whether a/c bal is dr or cr)

I/E = Income / Expenditure on Profit & Loss

SL/PL = Sales Ledger / Purchase Ledger

Diagram A1 - Double-entry book-keeping

Annex B - not used

(formerly “Sample Internal Accounts” diagrams, rendered obsolete by the merger of Categories and Pots)

Annex C - Transaction examples

Since version 2.02.00, CashPayt and CredPurch are separate types only on input, and are both stored as “Payt/Purch”. Similarly for CashRcpt and CredSale, stored as “Rcpt/Sale”.

Ref	Scenario	Txn type	Accounts	Notes
1	I pay by cheque / debit card for clothes	CashPayt	debit Extl “my bank account” credit Cpty “store x” debit Ctgy “Clothes”	
2	I use my credit card to buy clothes	CashPayt	debit Extl “my credit card” credit Cpty “store x” debit Ctgy “Clothes”	
3	I use my store card to buy clothes	CredPurch	debit Extl “my store card y” [credit Cpty “store y”] debit Ctgy “Clothes”	Txn type CashPayt could also be used, but input of CredPurch is slightly more streamlined
4	I pay off my credit card	ExtTfr	debit Extl “my bank account” credit Extl “my credit card”	In <i>Cashac</i> this is a <i>transfer</i> not a <i>payment</i> . The payment was made previously when the clothes were bought.
5	I pay for my groceries including cashback using my debit card	CashPayt	debit Extl “my bank account” credit Cpty “Tesco” debit Ctgy “Groceries”	txn 1 for total amount
		CashRcpt	debit Cpty “Tesco” credit Extl “notes & coin” credit Ctgy “Groceries”	txn 2 for cashback amount
7	I pay my bank charges	CredPurch	debit Extl “my bank account” [credit Cpty “my bank”] debit Ctgy “Interest/charges paid”	“my bank account” is provided by “my bank”. Cashpayt could also be used for this.
8	I withdraw cash from an ATM	ExtTfr	debit Extl “my bank account” credit Extl “Notes & Coin”	
9	I pay my builder in hard cash	CashPayt	debit Extl “Notes & Coin” credit Cpty “my builder” debit Ctgy “Building Project”	
10	I receive my salary direct to my bank account (see also 22)	CashRcpt	credit Extl “my bank account” debit Cpty “my employer” credit Ctgy “Net Salary”	.
11	I pay for gas by direct debit of £94 per month	ExtTfr	debit Extl “my bank account” credit Extl “British Gas” amount = £94	This is the ‘full approach’. The ‘simplistic approach’ is described at 15 below.

12	I receive a gas bill 'for' £331 - in fact this is the residual amount owing carried forward to next time, the charge for the gas this quarter is actually £289	CredPurch	debit Extl "British Gas" [credit Cpty "British Gas"] debit Ctgy "Gas" Amount = £289 Check that the balance remaining on Extl "British Gas" = £331.	"British Gas" has 2 accounts, Extl (showing how much I owe them or they owe me) and Cpty (showing how much I've paid them). Doing it this way really helps if the bill is shared between several co-residents (see below), but is probably over-the-top if it is just you paying.
13	I work out how much each of my co-residents owe for gas	CredSale	[debit Cpty "my co-resident"] credit Extl "my co-resident : owes" credit Ctgy "Gas"	
14	My co-residents reimburse me in cash for their share of the gas & other house bills	ExtTfr	debit Extl "my co resident : owes" credit Extl "notes & coin"	a zero balance is left on the debit account, assuming they pay off all that they owe.
15	I pay for gas by direct debit of £94 per month (simple method)	CashPayt	debit Extl "my bank account" credit Cpty "British Gas" amount = £94 debit Ctgy "Gas"	This method does not help you share the bill, nor to keep track of whether your direct debit is for roughly the right amount. But it's OK if you do not have to share the bill and if you trust the Counterparty to adjust the Direct Debit amount from time to time to match the cost of gas actually used.
16	I lend my friend money by cheque	ExtTfr	debit Extl "my bank account" credit Extl "my friend owes"	NB <i>not</i> a CashPayt since it leaves a liability outstanding : you expect the money to be repaid. Note the Extl Acc "my friend owes" is distinct from the Cpty "my friend".
17	My friend pays me back, eventually, in cash	ExtTfr	debit Extl "my friend owes" credit Extl "notes & coin"	
18	I draw down from my savings	ExtTfr	debit Extl "my deposit account" credit Extl "my current account"	If you use Internal Account balances then there may be one or more corresponding Internal Transfers as well, to show what the money is for (eg a particular project, or eg bailing out recurrent expenditure).
19	I allocate a monthly budget for all day-to-day living expenses	IntTfr	debit Intl "Budget" credit Intl "Gas", "Food", etc	the balance on Budget after all such transfers (incl #20 below) should be zero or slightly positive.
20	I allow for how much I earn in my budget	IntTfr	debit Intl "Salary" credit Intl "Budget" amount = avg monthly salary	a negative balance is left on the debit account until I'm actually paid
21	At the end of the month I make any budgetted funds (for example, for Going Out) that are surplus this month available for treats	IntTfr	debit Intl "Living" credit Intl "Treats"	a zero balance is left on the debit account. The 'sweep' function could also be used. Illustrates the theory, but I find it too much work in practice to do the accounts to this level of detail.

22	My employer deducts direct from my salary for my canteen subscriptions	CashRcpt	debit Cpty "my employer" credit Extl "My employer : owes" amount = my gross salary	This illustrates a different and more sophisticated approach from that in 10 above. Income Tax can be accounted for in the same way.
		CredPurch	debit Extl "My employer : owes" credit "my employer" amount = canteen sub debit Ctgy "Canteen Subs"	
		ExtTfr	debit Extl "My employer : owes" amount = salary balance after deductions credit Extl "my bank account"	
23	I buy Euro cash from my bank for my holiday (input as a single txn, stored as separate Payt & Rcpt)	Payt (GBP)	debit Extl "my bank acc" credit Cpty "my bank" debit Ctgy "Cost of FX"	
		Rcpt (EUR)	credit Extl "euro cash" debit Cpty "my bank" credit Ctgy "Cost of FX" *	the postings marked * are for the GBP equivalent value of the EUR at the stored mid-market rate
24	I pay for goods in France using my credit card	Payt (EUR)	debit Extl "my credit card - euro" credit Cpty "french supermarket" debit Ctgy "my holiday" *	NB this is a <u>separate</u> Extl account from my normal (GBP) credit card * as above
25	I receive my credit card bill after my holiday for each fgn ccy payment which I made, the credit card company has made an FX txn at a specified rate to convert to base ccy. I must enter FX txns to match, NB a separate FX transaction for <i>each</i> foreign currency item on the bill.	Rcpt (EUR)	credit Extl "my credit card - euro" debit Cpty "my bank" credit Ctgy "Cost of FX" *	* as above
		Payt (GBP)	debit Extl "my credit card" credit Cpty "my bank" debit Ctgy "Cost of FX"	
26	I buy a computer mouse for my daughter who has promised to pay me back	Purch	debit Extl "my bank acc" credit Cpty "computer store" debit Ctgy "children's stuff"	1. I buy the mouse
		CredSale	credit Extl "my daughter owes" debit Cpty "my daughter" credit Ctgy "children's stuff"	2. My daughter promises to pay me back
		Tfr (NB <i>not</i> Rcpt)	debit Extl "my daughter owes" credit "my bank acc"	3. My daughter pays me back

27	I pay my daughter's mobile phone bill, which I offset against her allowance (£35 per month)	Purch	debit Extl "My Daughter (owes)" £35 per month credit Cpty "my daughter" also debit Ctgy	1. I promise to pay my daughter her allowance
	<i>(a positive balance on these Extl Accs signifies that they owe me, and a negative balance that I owe them)</i>	Tfr	debit Extl "Mobile Phone Co re my daughter" £15 credit Extl "My Daughter (owes)"	2. Mobile Phone Co presents my daughter's phone bill (for £15, say) The use of a Tfr here is a shortcut, possible because my daughter has promised to pay me back for <u>all</u> of her phone bill, ie my debt to the phone company and her debt to me can be created both by the same txn.
		Tfr (sic)	debit Extl "my bank account" £15 credit Extl "Mobile Phone Co re my daughter"	3. I pay her phone bill ...
	<i>(my daughter's acc with me is left with zero balance, extinguishing my debt to her)</i>	Tfr	debit Extl "my bank account" £20 credit Extl "My Daughter (owes)"	4. I pay her allowance, net of mobile phone bill