



Manage your money with GnuCash



Use this open-source account manager with your online bank statements to get your finances in shape.



LINUX HAS all the high-quality home accounting software to compete with proprietary operating systems – but not when it comes to looks. *GnuCash* is one such application. It's perfectly capable of managing anything from household accounts to those of a small business, but the compromise is that it looks a little unorthodox, especially if you're used to *Quicken* or *Microsoft Money*.

GnuCash uses chequebook-style accounting, based on the double entry method. This might sound technical, but it's not. In essence, each transaction that you add has both a source and a

destination account. The source account is easy enough to understand – it could be your current account. But the destination one is a little different as it's basically an expense account. If you paid for some petrol with a cheque, *GnuCash* would see the transaction as a transfer of funds from your current or checking account to a fuel expenses one.

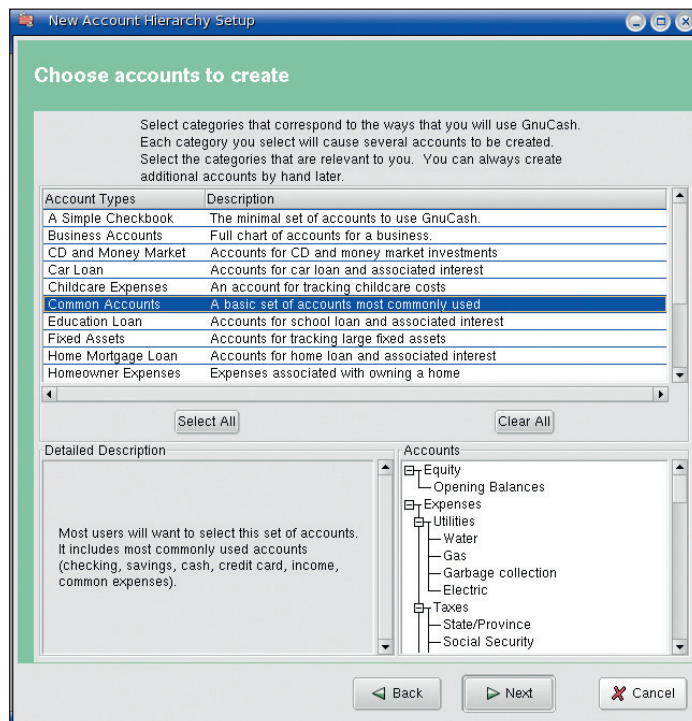
GnuCash also supports importing your accounting information from another application using either the *Quicken* interchange format (QIF) or the newer Open Financial Exchange format (OFX). Many banks use either of these two formats for their statement downloads, so it becomes easy to update

your *GnuCash* accounts. Other features include statement reconciliation, where you enter the final balance from your statement and simply check off the month's transactions. There's also a great investment tracker and report generator.

To get the best insight into how *GnuCash* works, you can step through the following tutorial to see some of the main features and working practices. The tutorial starts off with the basic concepts, before moving on to transactions and double entry. The second half covers downloading your statements, credit card accounts, split transactions and generating reports. Let's go!

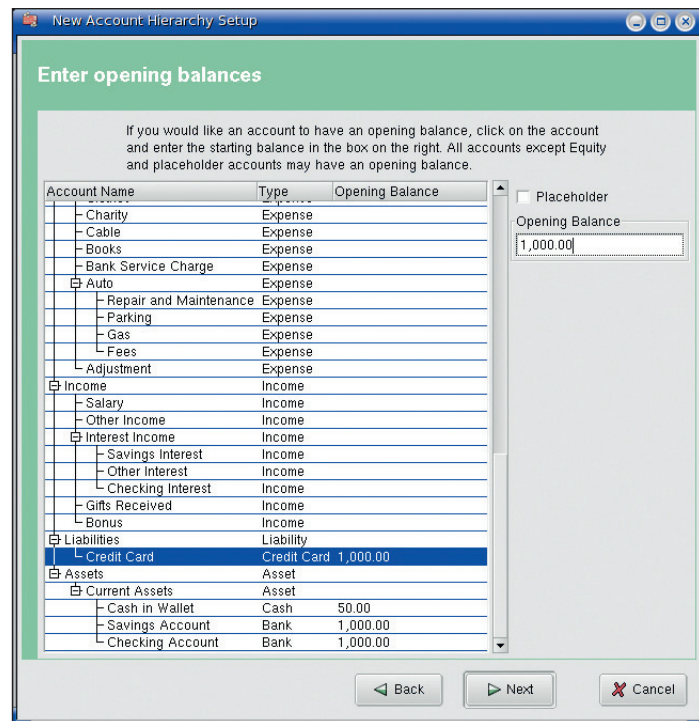
EASY GNUCASH TUTORIAL

STEP 1 CREATE YOUR BASIC ACCOUNTS



When first started, *GnuCash* asks you whether you'd like to create a new set of accounts, import some QIF files or run through *GnuCash*'s own tutorials. After you've selected Create A New Set Of Accounts, *GnuCash* will present you with what the developers call a 'druid' but is a wizard by any other name. Click on Next, and then choose your currency. The next screen is the account-choosing wizard. Selecting a scenario from the list will bring up a number of account types with a brief description of how they may be used. For home accounting, the most useful selection is Common Accounts, which creates a group of accounts that are typical for the average household.

STEP 2 OPENING BALANCES



The next window lists all of the accounts that are about to be created. It's here that you can specify their opening balances as a snapshot of your current financial status. For this example, we're just going to enter a few figures, but obviously for your own accounts you could spend quite some time getting the amounts right. For now, enter a value of 750 in Liabilities > Credit Card, and 1,000 in both Assets > Current Assets > Savings Account and Assets > Current Assets > Current Assets. Clicking on Next and Finish takes you into *GnuCash*'s main window.



STEP 3 UNDERSTAND THE MAIN WINDOW

Accounts	Account Name	Description	Total
Assets	Assets		\$2,050.00
Current Assets	Current Assets		\$2,050.00
Checking Account	Checking Account		\$1,000.00
Savings Account	Savings Account		\$1,000.00
Cash in Wallet	Cash in Wallet		\$50.00
Liabilities	Liabilities		\$1,000.00
Credit Card	Credit Card		\$1,000.00
Income	Income		\$0.00
Bonus	Bonus		\$0.00
Gifts Received	Gifts Received		\$0.00
Interest Income	Interest Income		\$0.00
Other Income	Other Income		\$0.00
Salary	Salary		\$0.00
Expenses	Expenses		\$0.00
Adjustment	Adjustment		\$0.00
Auto	Auto		\$0.00

The main view contains all the accounts created by the wizard. Opening up the various categories – Assets, Liabilities or Income – lists each sub-category for either an asset or expenditure. Your net worth is shown at the top of the account list, along with your profit. Each account has a total value associated with all the transactions it contains. The totals for the three accounts we provided an opening balance for should reflect the values we entered.

STEP 4 START A TRANSACTION

Date	Num	Description	Transfer	R	Deposit	Withdrawal	Balance
07/05/05		Opening Balance			1,000.00		1,000.00
08/05/05							

Next, we want to make a payment for an imaginary telephone bill of £75. Using the double entry method means the money is debited from one account and credited into another. For the telephone bill, we're going to take the money from our current or checking account, and move it to the Phone account under Expenses. The Phone account is one of the accounts included as part of the default Current Account setup.

As it affects two accounts, you could enter the transaction from either, but it makes more sense to do it from the checking account. You can open an account ledger by double-clicking on your selection or pressing Open. We need to open the checking account, which should contain only one transaction.

STEP 6 DOUBLE ENTRY

Date	Num	Description	Transfer	R	Expense	Rebate	Balance
08/05/05	1	Second quarter telephone bill			75.00		75.00

The first thing you should notice is that the money in your checking account has been reduced by 75. If you close the transaction window for the checking account, you should see that the Phone account, under Expenses, has been credited with 75. And if you open up the ledger for the Phone account, you can view the other entry for the transaction, but because this account has been set as an Expense account, the fields reflect an expense. A deposit to the Phone account is labelled as an Expense, and any money given back to you from such an account is a Rebate.

The parent account to Phone is labelled Expenses, and this has been updated to reflect the 75 in the Phone account. In fact, this parent account will show the total cost of all the expense accounts that fall beneath it. This is a great way of organising your costs.

GNUCASH ACCOUNT TYPES

There are three main account types for *GnuCash*: Assets, Liabilities and Equity.

■ **Assets** are all the things you can take ownership of, and there are six sub-categories:

Accounts receivable This can hold outstanding debts, of the kind small businesses endure after finishing a job.

Bank After cash, this is the next most accessible form your money takes in a current or savings account.

Cash The money you spend directly from your purse or wallet.

Currency Allows you to keep track of any foreign currency assets.

Mutual fund Similar to stock accounts, where you can track the value of your mutual funds.

■ **Stock** Helps you track the value of any stocks or shares you have invested in.

■ **Liabilities** hold the value of money you owe, such as with a credit card, and there are just two subcategories:

Accounts payable This works in the opposite way to accounts receivable, where you owe for a completed job.

Credit card Useful for credit card statements and other short-term loans.

■ There's a single account for **Equity**, which holds your net worth – the balance of your assets against your liabilities. You can use it in *GnuCash* to hold your opening balances, where you're bringing in your 'worth' at a certain specified point, after which point you will track your finances.

STEP 5 ENTER A TRANSACTION

Date	Num	Description	Transfer	R	Deposit	Withdrawal	Balance
07/05/05		Opening Balance			1,000.00		1,000.00
08/05/05	1	Second quarter telephone bill				75.00	925.00

Each transaction is entered under the previous one, as with a traditional ledger. *GnuCash* automatically puts the current date at the start of the next empty transaction. The Num field is for your own reference, such as a cheque or transaction number, so we'll just enter 1. Move to the next field, and enter a description for the transaction, such as 'Second quarter telephone bill'.

The next field is the other account that the transaction is linked to, the second entry. Clicking on the button in this field opens a list of all your available accounts. Select Expenses:Phone. Obviously the money is being withdrawn from your checking account, so to finish this transaction, tab to the Withdrawal field and enter 75 for the value of the bill, followed by Enter.

STEP 7 CREDIT CARD TRANSACTIONS

Date	Num	Description	Transfer	R	Payment	Charge	Balance
07/05/05		Opening Balance			1,000.00		1,000.00
08/05/05		Petrol				50.00	1,050.00

Expenditure on your credit card increases your liability as it's money you owe. The effect on *GnuCash* is that the credit card account may seem to act counter-intuitively, but that's because, as a liability, it's the opposite of an asset. Credits, or purchases, increase your liability by adding to the money you owe, while debits are a reduction in your liability.

To illustrate this idea, we'll enter a credit card purchase, and then pay the whole bill using money from the checking account. Open up the credit card ledger, and enter a transaction for buying petrol. After entering a description for the transaction, you still need to select an expense account (petrol comes under Auto > Gas). The value of the transaction, 50 in this example, is entered in the Charge field. Your total liability will increase to 1,050, and your expenses will also increase by 50.



STEP 8 REDUCE LIABILITY

Accounts	Account Name	Description	Total
Assets	Assets		£925.00
Current Assets	Current Assets		£925.00
Checking Account	Checking Account		£125.00
Savings Account	Savings Account		£1,000.00
Cash in Wallet	Cash in Wallet		£50.00
Liabilities	Liabilities		£0.00
Credit Card	Credit Card		£0.00
Income	Income		£0.00
Expenses	Expenses		£125.00
Equity	Equity		£1,050.00

As it's always wise to pay your credit card bill as soon as possible, we'll transfer some funds to cover our liability. Since there's not enough money in our checking account, paying the credit card bill would leave us in the red, but for the sake of this example, presume we've got a 500 free overdraft. Create a transaction from the checking account that withdraws 1,050 and places it into the credit card account. This should leave us with a debt of 125 in the checking account, illustrated by the number being displayed in red.

The status of our accounts should now show a profit of -125, our expenditure without any income; Equity of 1,050, the money we're holding in our wallet and savings account; and a net worth of 925, our Equity minus our negative profit.

STEP 10 BALANCE A TRANSACTION

Action	Memo	Account	R	Charge	Income
08/05/05	Monthly pay	Assets:Current Assets:Checking / c	900.00		1,000.00
		Expenses:Taxes:Social Security / n		100.00	
		Income:Salary / n			1,000.00

Another line has been added that contains the outstanding amount that needs to be balanced (currently 1,000). To move some of your gross income to your current account, select it from the Account column and replace the 1,000 with 900. A new line should be added with the final 100 that needs to be balanced.

Click on this line and select Expenses > Tax > Social Security, then Enter. Now that the transaction has been balanced, you can close the Salary ledger and view the changes to your account list, which will have been updated.

STEP 12 SCHEDULED TRANSACTIONS

Date	Num	Description	Total Funds In	Total Funds Out
		Assets:Current Assets:Checking / n	50	
		Expenses:Online Services / n		50

To set up a transaction that will be the same month in, month out, select Actions > Scheduled Transactions > Scheduled Transaction Editor.

The Scheduled Transaction Editor contains a calendar in the lower half, and a space for each scheduled transaction above. To create one, just select New and open the Transaction Edit window. It's daunting, but simply enter a descriptive name and edit the transaction in the familiar ledger at the bottom of the window. Because the scheduled transaction doesn't belong to any one account in particular, you have to manually balance the transaction by defining both an account to be debited, and one to be credited. In our example, we've debited our current account by 50 to pay for our internet access.

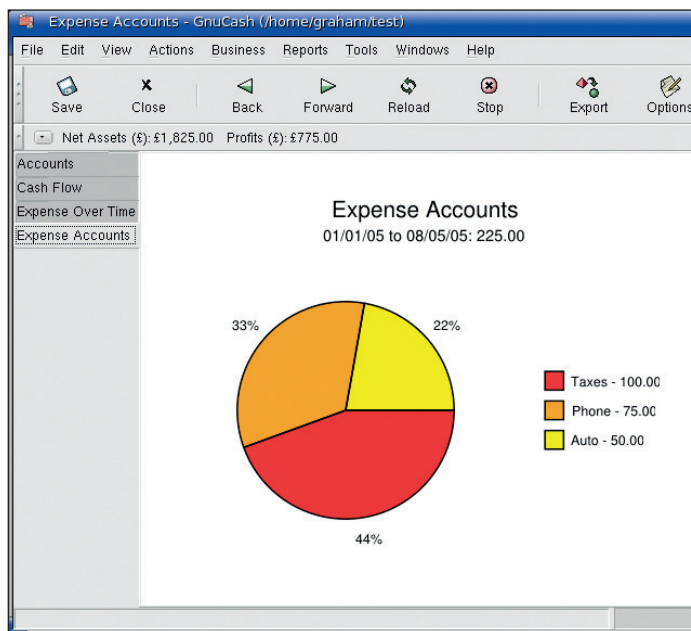
STEP 9 SPLIT TRANSACTIONS

Action	Memo	Account	R	Charge	Income
08/05/05	Monthly pay	Income:Salary	n	1,000.00	1,000.00
08/05/05			n	1,000.00	

Up to this point, we've entered transactions that have simply moved an amount of money from one account to another. But some transactions need to be split into different destinations, such as monthly income being split into part income, part tax, part pension and part social security.

To try this out, create a transaction under Income > Salary. Enter the gross amount you earn, not the net amount after tax. Enter a description for the transaction, then click on the Split button. The transaction is now split, but there's currently only one account used, and that's Income:Salary. Enter the gross amount into the Income column. *GnuCash* will open a requester to say that the transaction is currently unbalanced, and you need to click on Balance It Manually.

STEP 11 GENERATE A REPORT



Generating reports for your account information is very easy with *GnuCash*.

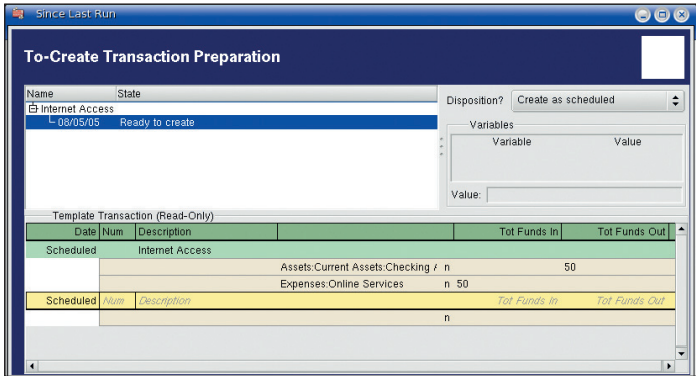
They're all available from the Report menu. As a quick example, select Reports > Income & Expense > Expense Piechart. This breaks up your expenses according to which sub-folder they belong to. At the moment, the majority of our expenditure has been on Social Security, beneath the Tax folder, which, as the chart shows us, was 44% of our total expenditure.

You can edit any specific parameters for a report by opening the Options window. From here, you can change the accounts that are included, as well as the date ranges to include. Custom reports can also be generated using a Lisp-like language called Scheme. They are output as HTML, which is a versatile way of storing them for later use.





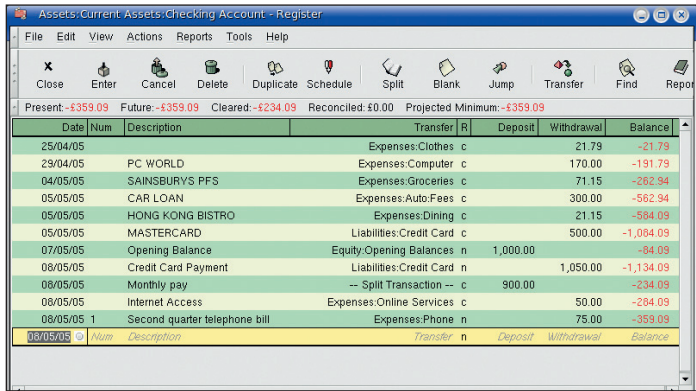
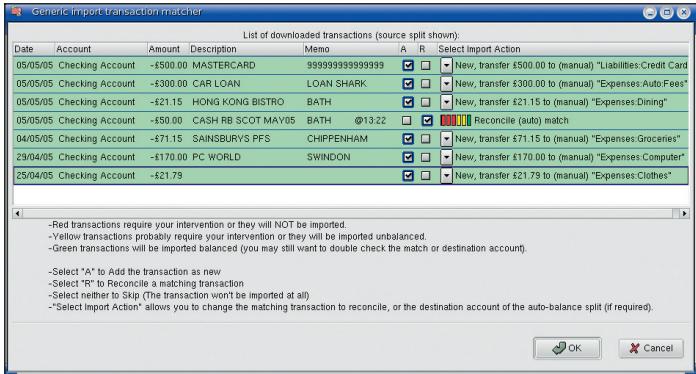
STEP 13 RUN PENDING TRANSACTIONS



Scheduled transactions need to be run – the program won't do it for you – and *GnuCash* will inform you automatically when there are any pending. To run the scheduled transaction created previously you need to select **Actions > Scheduled Transactions > Since Last Run**. This will bring up yet another window containing all the transactions that have been scheduled to run. Clicking **Next** will give you an overview of the real figures involved in each transaction. If you'd used variables, they would have been filled in at this stage.

After clicking the **Finish** button, the scheduler automatically generates the transactions, updating each affected account. With the above example, 50 should have been taken from the checking account and attributed to an *Online Services* expense.

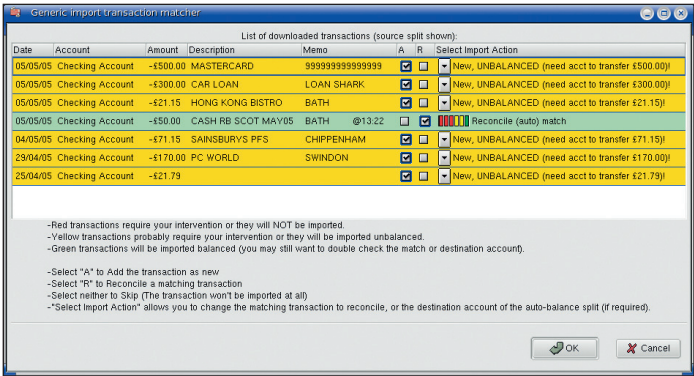
STEP 15 TRANSLATE STATEMENT TRANSACTIONS



We need to go through each transaction on our statement and assign a corresponding account for each one, as you would if you were adding the transaction manually into *GnuCash*. For example, the first one is a credit card repayment, so the **Import** action sets it as a transfer to the *Liabilities:Credit Card* account. This is done for each transaction in turn, except the one for the cash that was automatically reconciled.

Clicking on the **OK** button will add each transaction to your checking account and whatever other account the transaction was assigned to. Obviously you can't follow this final step without using an identical statement download, but the final checking account can be seen in the bottom image.

STEP 14 ONLINE BANKING



Most people manage their accounts using a web browser, so it makes good sense to download your statements from your bank and import them into *GnuCash*. *GnuCash* can import both QIF and OFX formats, and is able to learn your transaction habits well enough to often guess which accounts are affected by each transaction. If you have a choice, the best format to use is OFX, simply because it's an open standard and much better supported than QIF.

After you've downloaded your statement, you can import the data into *GnuCash* by selecting **File > Import > OFX** from the menu. The first time you use a statement from a certain account, *GnuCash* will ask you which of your *GnuCash* accounts correlates with the downloaded statement. *GnuCash* then loads each transaction from the statement into the **Import** window, and attempts to guess each kind of transaction.

In our example above, you can see that there are seven transactions in total, ranging from a £300 loan repayment to £170 spent at PC World. The only destination account *GnuCash* has been able to guess accurately is that for the £50 cash from a teller. That's because the word 'cash' is used to describe the money in our wallet account.



NOW DO MORE WITH GNUCASH

These step-by-step instructions have taken you through enough of what *GnuCash* is capable of to enable you to start using it for your own real accounts. Double entry may seem long-winded when compared with other accounting applications, but it enables you to see exactly what's happening at every stage, and also makes it easier to follow credit card statements, as they each have their own total.

GnuCash can manage payrolls and small business accounts, and it comes with several examples for this that you can load from the *Account druid*. There is also some excellent documentation online that goes some way to filling in the gaps (click on **Help > Tutorial and Concepts Guide**). When all else fails,

we'd suggest you try the extremely helpful online mailing list community, whose members are more than happy to offer configuration advice and help with the program. You can subscribe to the mailing list directly from the *GnuCash* website at www.gnucash.org.

The best thing about investing time in running your accounts with *GnuCash* is that you will never be locked in to upgrading your accounting software when a software developer decides to no longer support your version. *GnuCash* is an open source application where the file formats and the source code are always available for anyone to look at, which means that your financial information will always be accessible to you, even many years from now. ●