Dynamic Ledger: a tutorial

December 21, 2013

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1 Introduction

Dynamic Ledger is a program for managing personal finances. Unlike most other accounting programs, it gives you control over your finances even when you have several delayed transactions. With it, you can be exactly as frugal as you need to be, and you can easily avoid spending more money than you actually have. In addition, you can use the program to clean and condense your ledgers to save space.

2 Maintaining a ledger file

Dynamic Ledger requires you to keep your ledger in a tab-delimited spreadsheet file. This section shows you how to keep track of your transactions in this ledger file when you're using the program to balance your checkbook.

2.1 Managing delayed transactions over time

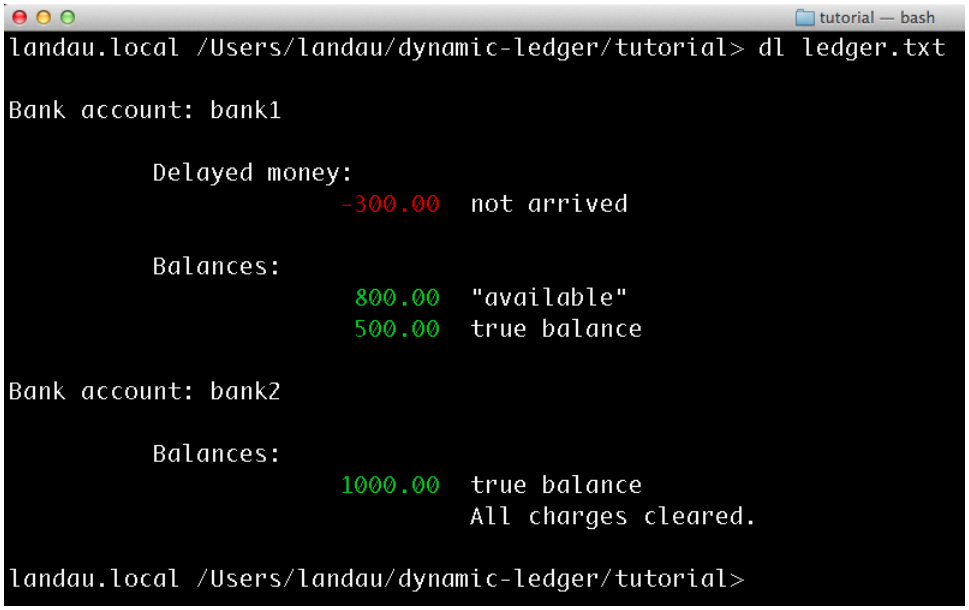
Suppose I have two bank accounts. I began with $800 in my first bank account, and then I make a withdrawal of $300. Suppose it's still too early for the $300 withdrawal to show up on my bank account's website. In addition, I have a second bank account of $1000. I make the following tab-delimited ledger file to record this information.

Let's start with the following tab-delimited ledger file, `ledger.txt`.

ledger.txt

amount	status	credit	bank	partition	description
−300	n		bank1		
800			bank1		
1000			bank2		

The "n" in the status column indicates that the $300 charge has not arrived at bank1 yet. I can use Dynamic Ledger to compute the following summary of `ledger.txt`.



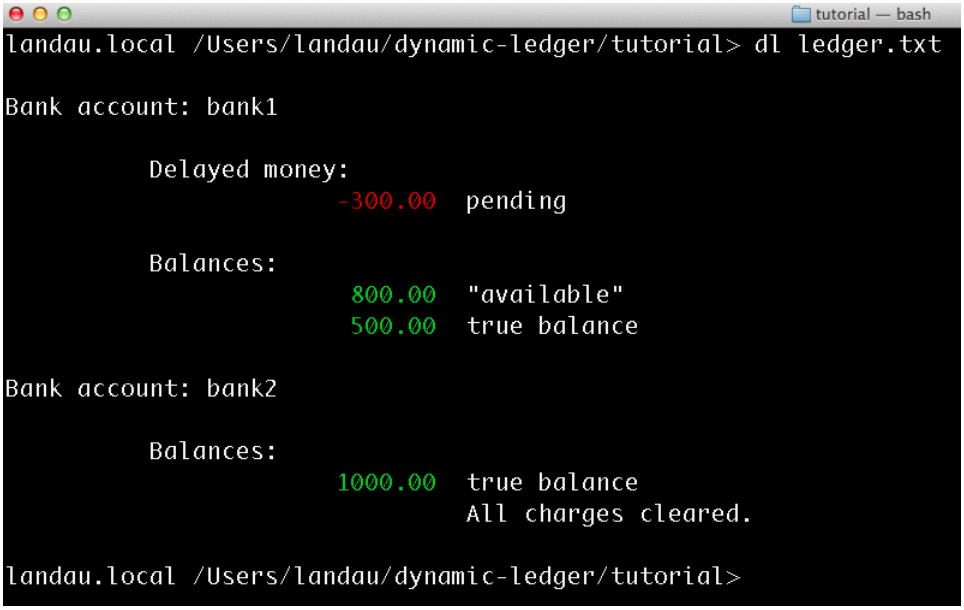
The program shows me an "available" balance of $800.00 because that is the balance I should see when I log on to my bank account's website to check. However, my true balance is $500 because of the delayed $300 withdrawal.

Suppose that next time I log on to my bank account's website, the $300 withdrawal is shown as "pending". To make `ledger.txt` agree with what I see online, I change the "n" status to "p":

ledger.txt

amount	status	credit	bank	partition	description
−300	p		bank1		
800			bank1		
1000			bank2		

The summary from Dynamic Ledger is now

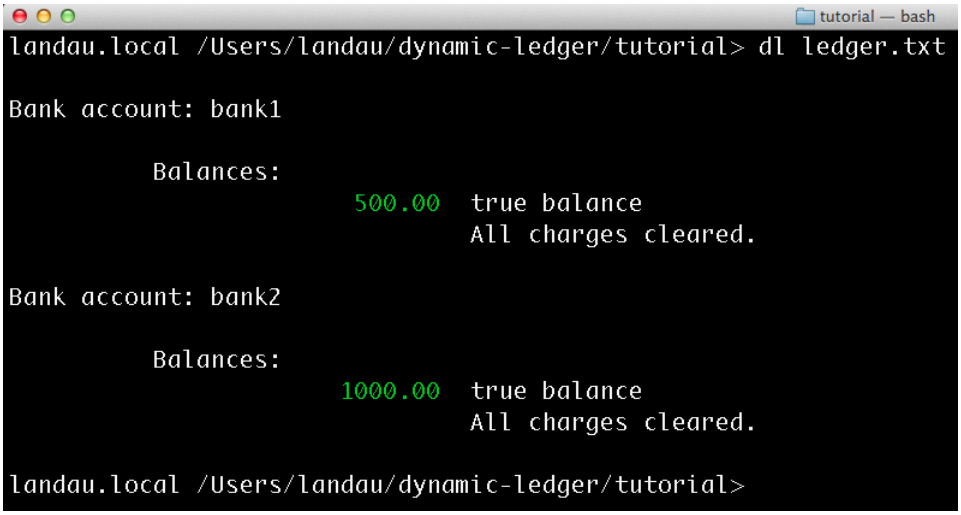


When the withdrawal finally clears online, I can delete the "p":

ledger.txt

amount	status	credit	bank	partition	description
−300			bank1		
800			bank1		
1000			bank2		

The summary from Dynamic Ledger is now



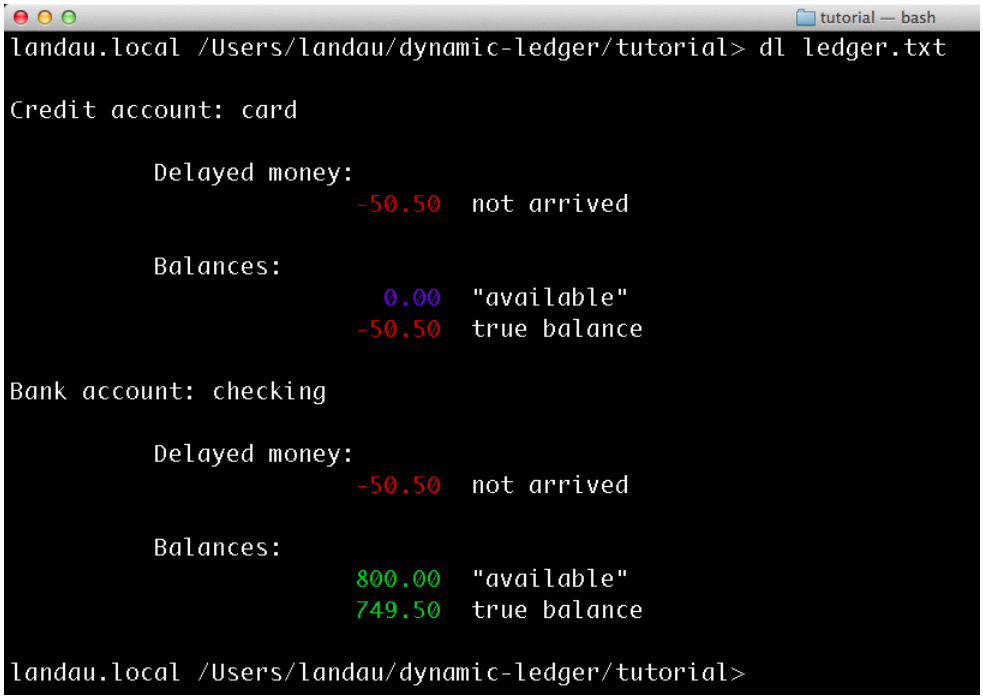
2.2 Managing credit accounts

Under the program's conceptual model, transactions flow through credit accounts into bank accounts. To see how this works, consider the following extended example. Suppose I start with a checking account with $800. I spend $5 on paper, then $15.36 on food, and then $30.14 on gas. I pay all those things with a credit card, but it's too early for any of those transactions to actually show up my credit card's website. I make the following tab-delimited ledger file.

ledger.txt

amount	status	credit	bank	partition	description
−30.14	cn	card	checking		gas
−15.36	cn	card	checking		food
−5	cn	card	checking		paper
800			checking		

Note the "cn" transaction status code for all three charges. That means I made these transactions with a credit card, but it's too early for the charges to actually show up on the credit account's website. The summary of the ledger is



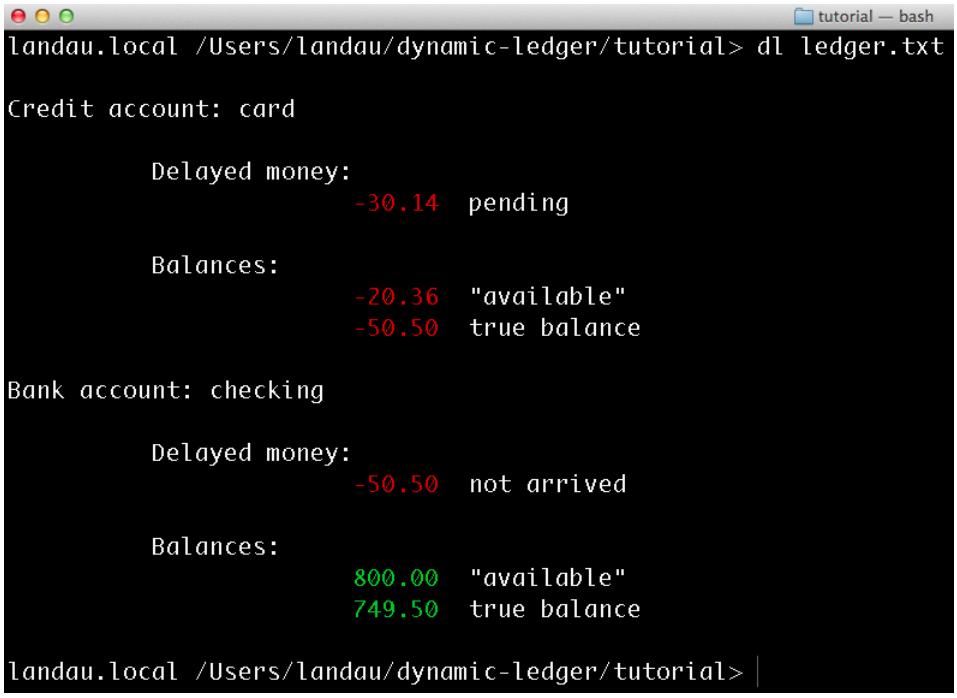
Notice that my credit card has an "available" balance of $0.00, but my true balance is -$50.50. That means that when I go on online, I should see an account balance of $0.00 (if I recorded my transactions correctly). However, because I have delayed transactions, I owe the credit company $50.50 in reality. Similarly, my bank account should show an "available" balance of $800.00 online, but in reality, I only have $749.50 left to spend.

Over time, transactions will begin clear on the credit card company's website. Suppose that after a few days I see that the food and paper transactions have cleared, but the gas transaction is still "pending". I change my transaction status codes to reflect the changes.

ledger.txt

amount	status	credit	bank	partition	description
−30.14	cp	card	checking		gas
−15.36	c	card	checking		food
−5	c	card	checking		paper
800			checking		

"cp" means pending on the credit card, while "c" means charged to the credit card but unpaid. The new summary from the program looks like

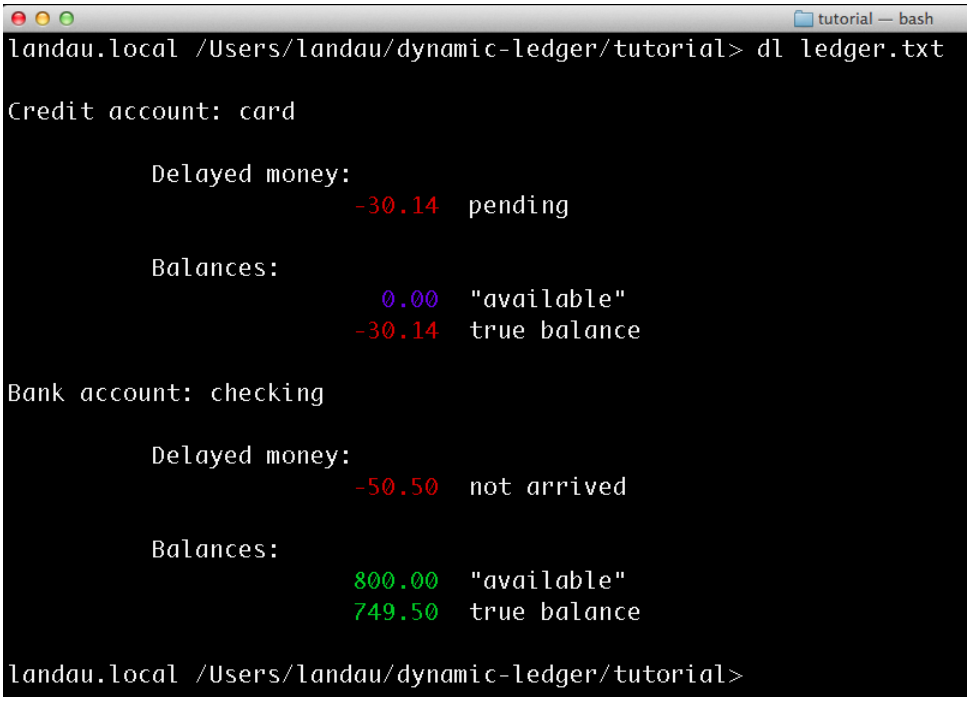


Since some charges have cleared, I can now make a credit card payment. I now pay my "available" debt of $20.36. (I cannot pay for pending charges). I now think of the food and paper transactions as a single charge of $20.36 en route to my checking account. When I make the payment and it clears on the credit company's website, I update the ledger file.

ledger.txt

amount	status	credit	bank	partition	description
−30.14	cp	card	checking		gas
−15.36	n	card	checking		food (cred pmnt $20.36)
−5	n	card	checking		paper (cred pmnt $20.36)
800			checking		

The "n" statuses means that the credit payment has not shown up on my bank account's website yet. The summary from the program is now

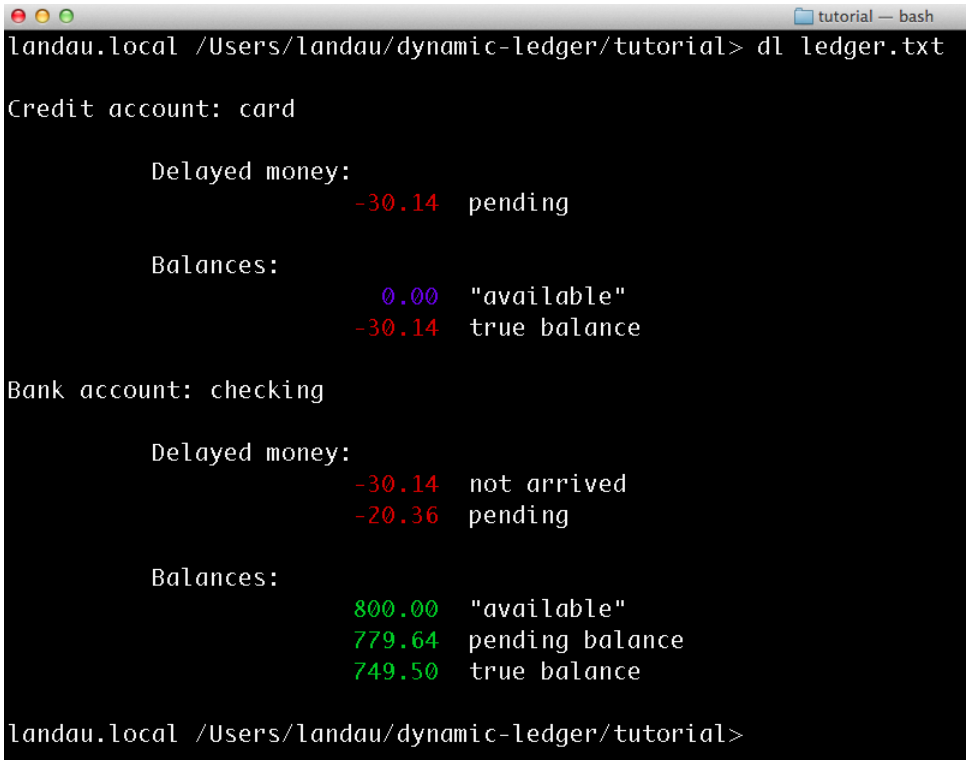


I wait a day or two, and then I log on again and see that my credit card payment shows up as "pending". Now, I change the n's to p's.

ledger.txt

amount	status	credit	bank	partition	description
−30.14	cp	card	checking		gas
−15.36	p	card	checking		food (cred pmnt $20.36)
−5	p	card	checking		paper (cred pmnt $20.36)
800			checking		

My summary shows

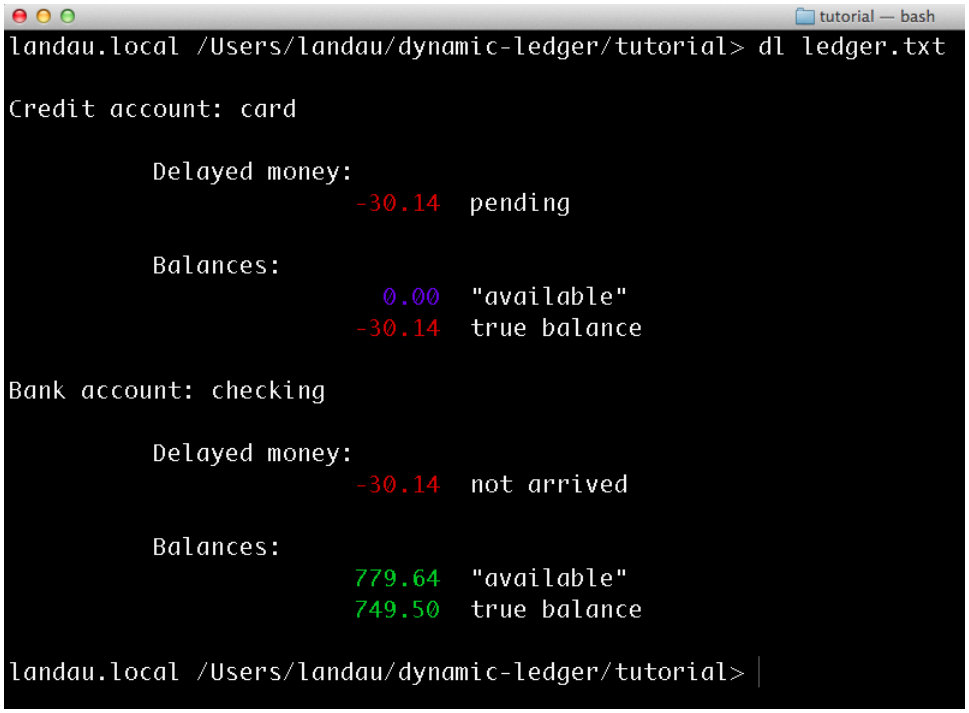


Finally, when the credit card payment clears, I can delete the p's to show that the food and paper charges have completely cleared all my accounts.

ledger.txt

amount	status	credit	bank	partition	description
−30.14	cp	card	checking		gas
−15.36		card	checking		food (cred pmnt $20.36)
−5		card	checking		paper (cred pmnt $20.36)
800			checking		

My updated summary is now



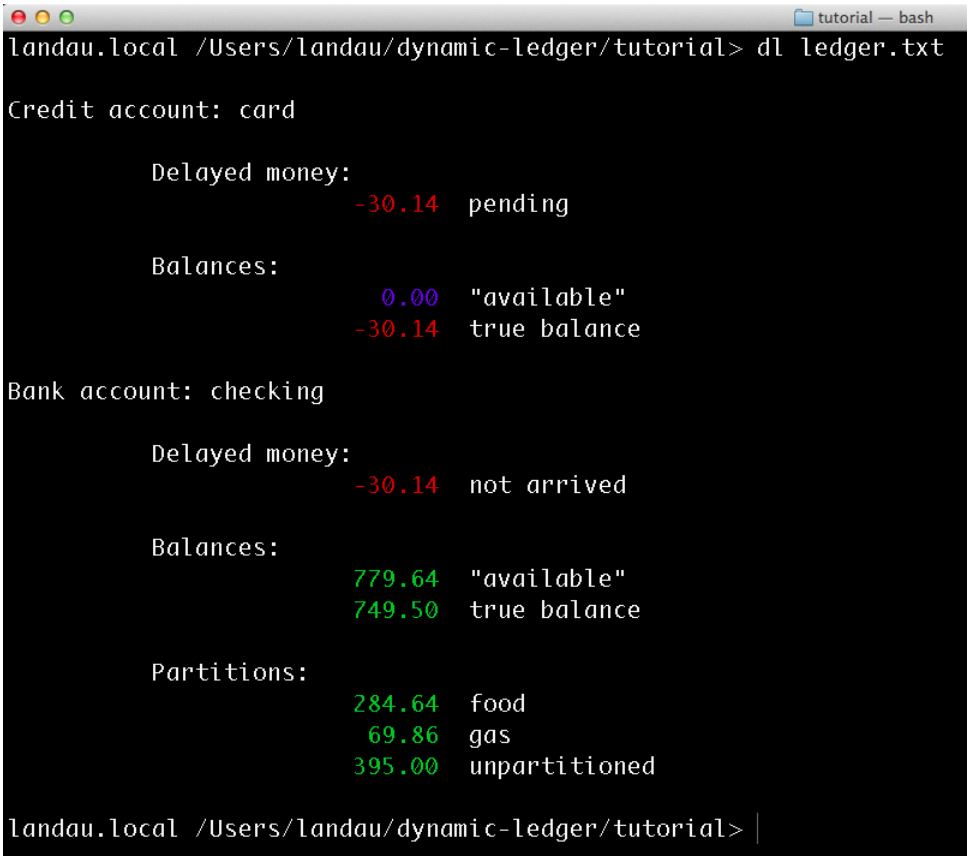
2.3 Partitioning bank accounts

The program lets the user divide bank accounts into partitions. For example, if I make special partitions in my bank account for food and gas, I might write

ledger.txt

amount	status	credit	bank	partition	description
−30.14	cp	card	checking	gas	gas
−15.36		card	checking	food	food (cred pmnt $20.36)
−5		card	checking		paper (cred pmnt $20.36)
400			checking		
300			checking	food	
100			checking	gas	

And my summary would look like



Notice that only the true final balances for the partitions are shown. In other words, partition balances are calculated as if all transactions have completely cleared. This feature encourages you to avoid spending more money than you actually have.

3 Installing the program

4 Using the program