

# Postbooks: free and open source accounting/ERP with PostgreSQL

*Daniel Pocock*

*pgday.ch 2016*  
*Rapperswil*

# Accounting

- Inputs
  - accounting transactions (bills, bank account entries, receipts, cheque stubs)
- Outputs
  - Reports (balance sheet, P&L, tax calculations)

# Double-entry accounting

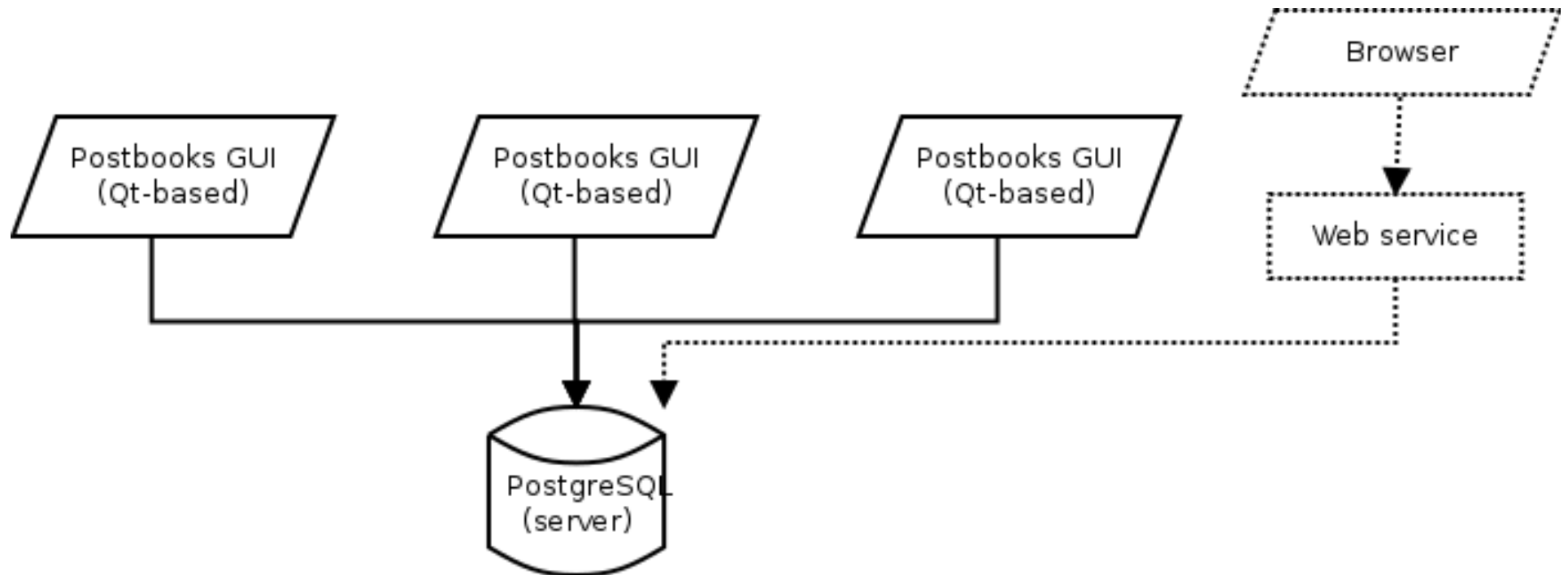
- Every transaction involves a combination of two or more debits/credits
- $\text{sum(credits)} = \text{sum(debits)}$
- E.g. Sell a widget for CHF 108.00:
  - Credit “Product Sales” account: 100.00
  - Credit “Mwst liability”: 8.00
  - Debit “Accounts Receivable”: 108.00

Product	Postbooks	Tryton	GnuCash	LedgerSMB	HomeBank	Skrooge	KMyMoney	BG Financas	Grisbi
GUI	Y	Y	Y	N	Y	Y	Y	Y	Y
Web UI	Y	Y	N	Y	N	N	N	N	N
Multi-user	Y	Y	N	Y	N	N	N	N	Y
File storage	N	Y	Y	N	Y	Y	Y	N	N
SQL storage	Y	Y	Y	Y	N	N	Y	Y	Y
Multi-currency	Y	Y	Y	Y	N	Y	Y		Y
A/R	Y	Y	Y	Y	N	Y	Y		Y
A/P	Y	Y	Y	Y	N	Y	Y		Y
VAT/GST	Y	Y	Y	Y	N	N	Y		Y
Inventory	Y	Y	N	Y	N		N		N
Linux	Y	Y	Y	Y	Y	Y	Y	Y	Y
Windows	Y	Y							
Mac OS	Y	Y							
Technology	C++, JavaScript, Node	Python	C	Perl	C			Java	
License	CPAL	GPL3	GPL2	GPL2					

# Web or full GUI?

- Web:
  - Good for remote access
  - Users who consult for multiple organizations (e.g. accountants, book-keepers) don't need to install every version that clients are using
- Full GUI:
  - May be faster
  - More sophisticated user interfaces, multi-window

# Basic Postbooks architecture



# Postbooks packages

- Only Qt-client is packaged, not the web-based solution. Available on Debian, Ubuntu, Fedora.
- Install the Postbooks package on each workstation:

```
apt-get install -t jessie-backports postbooks
```

- Install PostgreSQL server and schema on at least one host:

```
apt-get install -t jessie-backports postgresql-9.4 \  
postbooks-schema-quickstart
```

# Postbooks schema files

Schema	Package	Notes
empty	postbooks-schema-empty	No chart of accounts, most tables empty
quickstart	postbooks-schema-quickstart	Basic chart of accounts, best place to start for many US users
demo	postbooks-schema-demo	Contains sample data to play with, DO NOT USE as the starting point for a real installation



# Demo

# Consumption tax

- Switzerland: Mwst, Australia: GST, UK: VAT, ...
- A tax on both:
  - goods (e.g. TV sets, pizzas) and
  - services (dog washing, web hosting)
- Businesses reclaim the tax on their inputs and charge it on their outputs, consumers ultimately pay it
- Sunglasses 100 CHF + 8% Mwst = 108 CHF

# VAT (EU countries)

- Each country has a different rate
- In those cases where a business in one country ships goods to a business in another company, the seller can reclaim the VAT from purchasing the product but does not charge VAT on the export
- Accounting software must categorize these transactions carefully

# VAT demo