

« *Perl to the rescue of the dummiest South Pacific Island book-keeper!* »

GALA : General Accounting as a Language API

by Franck Porcher, Ph.D

Proposal for a standard talk (20 minutes)

Summary

Title :	GALA : General Accounting as a Language API
Qualifications :	Senior Perl and Web developer
Audience :	Anyone interested in ERP
Length :	Standard talk : 20 minutes

Biography

The author was educated in Paris, France, and received a Ph.D. in theoretical computer science in 1991 from Pierre & Marie Curie University (Paris VI) for his work on constraint logic programming languages for knowledge representation.

He worked a full decade at Dassault Electronics in Paris as a research engineer in the fields of compiler design, artificial intelligence and neural network computing.

He lived for two years in Vancouver, British Columbia, Canada, then moved to Tahiti, French Polynesia, in 1995 where his company, now Smart Technologies (www.smartech.pf), has quickly become the leading provider of Open Source & Linux innovative solutions.

He teaches various Open Source technologies in a computer science bachelor degree at the Université de la Polynésie française.

He lives in beautiful Opunohu bay in Moorea with his wife, their numerous birds and beautiful shepard dogs.

Outline

In this talk, I discuss the shortcomings of traditionnal accounting software packages for individual and small companies. I show that their limited integration with desktop productivity software, and the weak short-cut and extension capabilities inherent in their rigid design of the user interface as a menu/input-screen driven process, lead to a frustrating and time consuming experience for the newcomer.

Then, I present **GALA**, a three-fold acronym for a « General Accounting LAnguage » specification, a « perl engine for the GALA language», and an « integrated OpenOffice Calc front-end » accounting module using the GALA language as its core API.

As a task oriented language, designed for simplicity and easy appropriation, we show that GALA includes a set of high level primitives which allows accounting tasks of any sort to be expressed as simple GALA

scripts. We show that these primitives include all the features needed to account for data acquisition, validation and correction, data extraction and reporting, as well as storage, backup, and libraries administration.

As an engine for the GALA specification, we show how GALA is using Perl to compile GALA scripts into native perl programs based on the run time library GALA.pm.

As an integrated OpenOffice module using the GALA language and its perl engine as its core API, we show that GALA leads the path to broad and easy extensions through GALA scripts and libraries. We show that the GALA system architecture provides the user with a strong integration and familiar interaction with its desktop productivity software, keeping available all the benefits of an OpenOffice Calc spreadsheet versatility as a data input front-end.

Lastly, I show that, as a language API and an actual implementation, GALA allows to define new high-level accounting primitives, new plug'ins for back-end storage, as well as new GUI front-ends as Gala scripts generators.

I end the talk with a complete demo drawn from my company, which has officially been using GALA as its sole accounting software for the last four yearly terms. I show the OpenOffice calc being used to input the accounting data, the two-stages transform (calc to gala translation, then gala to perl compilation), the execution, and the error continuation trapping back to OpenOffice.

I conclude that as an experimentation towards a new accounting framework, the concept of GALA as a language API makes sense for overcoming the main shortcomings of traditionnal accounting software packages.