

« *Perl-powered South Pacific Islands* »

## **CGI::Forge : Integrated Web development framework** *by Franck Porcher, Ph.D*

Proposal for a long talk (40 minutes)

### Summary

Title :	<b>CGI::Forge : Integrated Web development framework</b>
Qualifications :	Senior Perl and Web developer
Audience :	Anyone interested in modern web application development
Length :	<b>Long talk : 40 minutes</b>

### 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](http://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

**CGI::Forge** is a complete and stable, yet evolving Perl technology designed to provide the developer with a single unified object oriented framework aimed at streamlining the process of fast-developing reusable, robust, flexible, and cost effective enterprise-class web-based applications. First launched in 2002, CGI::Forge has since been used in French Polynesia and New Caledonia for a wide range of projects :

- [atp.opt.pf](http://atp.opt.pf), an XML based content management system for the local French Telecom Web/Wap/SMS multimedia portal.
- [secure.ilm.pf](http://secure.ilm.pf), a highly secure web-application to publish lab results to medical practitioners.
- [www.sgcb.nc](http://www.sgcb.nc), the banking portal of the Société Générale Calédonienne de Banque.

- [www.tahitibook.pf](http://www.tahitibook.pf), a local newspaper merchant site.
- [www.intermat.pf](http://www.intermat.pf), a building materials company B2B web application.

To deliver its promise, CGI::Forge relies on many related modules to provide the developer with the strong semantic primitive mechanisms needed to easily capture the intrinsic properties of web application programming, namely :

- A **state machine**, to easily modelize the web application multi pages overall navigation logic - usually implemented as *content decoration* through various means of text, image or menu based hypertext links and form widgets.
- A **state persistency** engine.
- A powerful **compliant DHTML generation engine**, based on :
  - a consistent multi-part DHTML document model,
  - an **extensible XML-based templating system**, supporting recursivity, dynamic data binding, and lazy-evaluation, and its compiler to native Perl code for added efficiency,
  - a **registry** language, its compiler and virtual machine engine, to present a unified and coherent interface to CGI::Forge modules in order to publish and access the application data.

**CGI::Forge** is designed to be easily extended through plug'ins. Existing plug'ins are available for DOM/Javascript, CSS styling, scripting, menus, sessions, database access, and XML-based content.

Last but not least, most of CGI::Forge is in the process of being released to the CPAN.