

Lian Sebe's list of major projects
(most recent on top of the list)

Project: MayaBike
Duration: 3 month
Role: Architect, analyst, developer
Company: Contracted by GreenRevolution (<http://www.greenrevolution.ro/velo.php>)
Team size: 1
Used skills: Hardware testing for features, Perl, PHP, Serial connections, Windows API & Services, etc.

In this project, the task was to make the existing national-wide iVelo bike renting system leave the paper-form age and enter the digital age.

For this, at each rental point, I architected an IT solution capable to scan users' IDs, ocr data, take their photo and signature and validate them against the server. The bikes are assigned to users and tracked using barcodes and also a complete inventory tracking and reporting systems are in place.

The project included hours of technical discussions with the hardware suppliers (Honeywell for barcode readers, Fujitsu for scanners, Transym for OCR, etc), testing their functionality and designing a complete solution at rental point as well as HQ level to track everything.

On the programming side, I have developed Windows modules and services capable to read on demand data from the devices (using ActivePerl), along with the usual web application based on Perl and PHP.

Unfortunately, the project is currently on hold (since January 2011) due to insufficient provisioned funding.

Project: CRM for "Recolamp"
Duration: 1 month
Role: Architect, analyst, developer
Company: Recolamp, (<http://www.recolamp.ro>)
Team size: 1
Used skills: PHP, Apache, Linux Debian, PostgreSQL, D(HTML), etc.

Bespoke intranet based CRM, comprising modules for managing companies, contacts and mail-merges for events. The backbone is pretty much the same as the one for AEA Mediu Consulting, however it was ported to linux Debian.

Project: HP Service Manager interface
Duration: 2 month for CEC Bank. Ongoing.
Role: Architect, analyst, developer
Company: Contractor for ASSECO SEE, Romania (<http://www.asseco-see.com/>)
Team size: 3
Used skills: Perl, Apache, Solaris, Oracle, HTML, Web Services, HP Service Manager, etc.

Porting the web interface built & deployed starting 2007 to directly access the new HP Service Manager (Oracle), offering a thin over-the-web client as opposed to the fat (heavily licensed) official client. Variations of this interface have been implemented as of yet, in 3 major banks.

Project: MayaScan KFX (Own product, <http://MayaScanKFX.maya-control.com>)
Duration: 6 month
Role: Architect, analyst, developer
Company: Self employed
Team size: 1
Used skills: Perl, Tk, SOAP, Webservices, etc.

Standalone Windows application designed to access and control any TWAIN document scanner, allow few operations on

the scanned images and finally send the images to the Kofax server through its publicly exposed webservice interface. The product is supposed to fill-in the gap, for the need to have a light client for Kofax (<http://www.kofax.com>) and will be on the market starting mid April 2010.

Project: HP OpenView Universal Grapher (Raiffeisen Bank)
Duration: 3 month
Role: Architect, analyst, developer
Company: Net Consulting, Romania (www.netconsulting.ro)
Team size: 2
Used skills: Perl, Apache, Solaris, Oracle, HTML, GnuPlot, etc.

Web interface to directly access HP OpenView database (Oracle), in order to extract the counters data collected from various devices in the bank network and present them in a graphical manner.

Due to the request of representing data as single line on the chart, multiple line and even box&whiskers for standard deviation, I have chosen GNUPlot for the graphical processing. Due to the lack of support for GNUPlot in perl (after studying CPAN modules) I preferred to use GNUPlot directly piped into the scripts.

Project: HP OpenView Availability Reporting (Raiffeisen Bank)
Duration: 3 month
Role: Architect, analyst, developer
Company: Net Consulting, Romania (www.netconsulting.ro)
Team size: 2
Used skills: PHP, Perl, Apache, Solaris, Oracle, HTML, GD, etc.

Web interface to directly access HP OpenView Operations database (Oracle), in order to extract the reporting data and present them in a tabular as well as graphical (piecharts) manner.

There are 2 major modules: one that allows the authenticated users enter the period of time they want the report on and a selection of devices (eg ATMs, routers, etc); The second module runs a scheduled first day of month report for the last month and send the results by email to interested groups.

Worth to mention that **to prevent code duplication** as much as possible, the second module it's in fact acting as a webclient for the first one.

The project included making Apache on *nix authenticate users transparently (Single Sign On) to a Windows 2003 ActiveDirectory.

Project: Green Products Procurement website
Duration: 2 month
Role: Architect, analyst, developer
Company: AEA Mediu Consulting, subsidiary of AEAT UK (www.aeat.co.uk)
Team size: 3
Used skills: PHP, Apache, MySQL, D(HTML), etc.

A government endorsed program that resulted in a website, that allows collecting/entering data from merchants about commercialized "green" products, in an "administrative" area.

For the public it allows searching in various forms through the products.

<http://www.achizitiiecologice.ro/gpp/>

Project: Survey site for "Waste Arising Welsh Group"
Duration: 2 month
Role: Developer
Company: AEA Mediu Consulting, branch of AEAT UK (www.aeat.co.uk)
Team size: 3
Used skills: PHP, Zend Framework, Apache, Solaris, MySQL, D(HTML), etc.

A 2 month project to create a Zend Framework based internet site to collect survey data for Waste Arising Welsh Assembly

Group. The application was collecting data for year 2008. (www.urbanmines.org.uk/?i=1565)

Project: CRM for "AEA Mediu Consulting"
Duration: 4 month
Role: Architect, analyst, developer
Company: AEA Mediu Consulting, subsidiary of AEAT UK (www.aeat.co.uk)
Team size: 1
Used skills: PHP, Apache, Windows2003, PostgresSQL, D(HTML), etc.

Bespoke intranet based CRM comprising modules for managing companies, contacts, projects and contracts. The backbone is pretty much the same as the one for Creative Translations and UNDP, however it was rewritten in PHP, changed to Postgres as backend Database, and added specific functionalities (projects & contracts module).

Project: HP OpenView Service Desk interface
Duration: 4 month for each implementation in 2 major banks (Raiffeisen & CEC).
Role: Architect, analyst, developer
Company: Net Consulting, Romania (www.netconsulting.ro)
Team size: 3
Used skills: Perl, Apache, Solaris, Oracle, HTML, etc.

Web interface to directly access HP OpenView ServiceDesk database (Oracle), offering a thin over-the-web client as opposed to the fat (heavily licenced) official client. Variations of this interface have been implemented as of yet, in 2 major banks 3rd one pending.

The project included making Apache on *nix authenticate users transparently (Single Sign On) to a Windows 2003 ActiveDirectory.

Project: Assuring data integrity and privacy for 2007 and 2008 national elections
Duration: 1 month for each poll, 3 polls
Role: System architect, analyst, developer
Company: Net Consulting, Romania (www.netconsulting.ro)
Team size: 2
Used skills: Perl, GnuPg, Windows, PKI knowledge, etc.

Assuring data integrity and privacy during transmission from the regional level (42 locations) to the capital city for the last (3) national elections. The solution used GnuPG encryption and signing for each sent archive.

Project: Stage 2 of private pensions data processing
Duration: 6 month
Role: Architect, analyst, developer
Company: Net Consulting, Romania (www.netconsulting.ro)
Team size: 2
Used skills: Perl, Apache, Windows 2003 srv, Postgresql, HTML, etc.

Set of intranet applications able to support the human validators hired to bulk process the private pension applications received in a 4 month governmental program. Net Consulting was offering this service for 3 major players on the private pension market (including Interamerican), totaling 300,000 applicants at the end of the program (February 2008)

The applications include a web based error reporting system (per applicant), automatic OCRed & ICRed metadata & image processing, automatic data transfer and daily reporting to each of the 3 HQs.

Project: Creative Translations
Duration: 3 month
Role: Solution Architect / Developer
Company: Creative Translations, Romania (www.romanian-translations.org)
Team size: 1

Used skills: Perl, CGI, DBI, MySQL, HTML, JavaScript, etc.

Custom built CRM having as a base the **Contacts & Events Database** created for UNDP. Particularities for this translation company included creating modules for:

- contracting (outsourced) translators capabilities, fees, availability and scoring
- clients (companies and individuals) looking for translation services
- translation jobs - associating the documents to be translated WITH translator(s) having the required language ability AND an in-house project manager AND the client.

Project: Sendrata
Duration: 1 year
Role: Web programmer
Company: Sendrata, Netherlands
Team size: 1
Used skills: Perl, CGI, DBI, MySQL, HTML, etc.

Adding tons of functionality to a complex governmental extranet maintained by this Dutch company (www.sendrata.nl).

Project: Contacts & Events Database
Duration: 2 month
Role: Architect/Developer
Company: UNDP Country Office in Romania(www.undp.ro)
Team size: 1
Used skills: Perl, LDAP, PHP, Apache, MySQL, (D)HTML.

Recognizing the need for a corporate global contacts database I built this MySQL based front-end interface for managing corporation's contacts. The staff members are authenticated using the existing LDAP server and are empowered with the regular features like: add/modify/delete categories/companies/people/events as well as invite(associate) people to events. The end result is to generate flexible data selections on various criteria, ready to use in MS Word mail merge tasks. This intranet application reduced dramatically the time needed for generating printed invitations for certain corporate events (e.g. UN Day), from ~2 month to few days.

Project: Emails Archiver
Duration: 1 month
Role: Architect/Developer
Company: UNDP Country Office in Romania(www.undp.ro)
Team size: 1
Used skills: Perl, MIME, PHP, Apache, MySQL, DHTML, qmail

Due to the high volume of emails sent by the organisation's information center my users started to reach the limit of their Inbox.

This program is receiving all the emails through a special POP3I account, splits it in components (e.g. body, attachments), loads headers in a MySQL database and deposits the attachments in a special directory structure.

The PHP frontend allows then easy consultation of the old emails and search on date and/or subject/body keywords.

This intranet application saves lots of bandwidth when backup-ing user emails since the ~1 GB of emails are now located in only one point, on the intranet server.

Project: "Digital Sender"
Duration: 1 month
Role: Architect/Developer
Company: UNDP Country Office in Romania(www.undp.ro)
Team size: 1
Used skills: Perl 5.8.0, ImageMagick, SMTP perl modules, Perlex, service creation in W2k.

Since the main scanning target of our users is the PDF format, I built this program that automatically connects to a Xerox scanner repository, gets the tiff file resulted after scanning, converts it to pdf, then sends the pdf to the appropriate user according to the scanning template.

As little as it may sound the program saved ~\$2,000 for a digital sender, or \$200 per user for a professional scan-to-pdf solution (e.g. PaperPort).

Project: @mail RADIUS - adding RADIUS authentication to @mail webmail interface.
Duration: 1 month
Role: Analyst Programmer
Company: Calacode, Australia - (www.calacode.com)
Team size: 1
Used skills: Perl/mod_perl, @mail, RADIUS, SQL, etc.

This US/Australian company produces a nice and useful full-featured webmail interface, @mail, that is entirely based on Perl.

@mail needed to be customized for easier integration in ISPs dial-in environment. My module adds the possibility to authenticate webmail users on a RADIUS server, with minimum intervention over @mail.

Project: @mail PGP - adding PGP encryption/decryption capabilities to @mail webmail interface.
Duration: 2 weeks
Role: Analyst Programmer
Company: Calacode, Australia - (www.calacode.com)
Team size: 1
Used skills: Perl/mod_perl (file manipulation libraries), GnuPG, SQL, @mail, etc.

This US/Australian company produces a nice and useful full-featured webmail interface, @mail, that is entirely based on Perl.

@mail needed to allow users to encrypt/decrypt emails using PGP. My module allows the admin to generate PGP keys for the users, allows users to store public keys in their addressbook and to encrypt/decrypt/sign messages. Instead of using existing Perl->GnuPG modules, I preferred to create my own interface from scratch, for speed (amongst other) reasons.

Project: Web configuration interface for RAV Antivirus for Mail servers, as Webmin module.
Duration: 2 month
Role: Analyst Programmer (telecommuting)
Company: GeCAD Software - (www.ravantivirus.com)
Team size: 1
Used skills: Perl (CGI, templates, text processing), HTML, Webmin, Apache.

GeCAD produced one of the best antivirus program for *nix e-mail servers. In order to ease the administration of this product I was contracted to build a web interface to update the config file. While the webconfig was designed to integrate as a module in Webmin universal configuration tool, it can be used as a stand alone interface under any webserver on *nix, like Apache.

The company offered this webconfig interface free of charge to their licensed users and received lots of appreciation emails from the system administrators in charge with maintaining the product.

Project: Universal Internet Server (UIS™)
Duration: 6 month
Role: Analyst Programmer
Company: DC Software Ltd.
Team size: 2
Used skills: Full life cycle development. FreeBSD installation, configuration and tuning, Full systems configuration Hard & Soft, Web site creation, web admin interface creation using HTML, Perl (templates, XML, CGI).

Building-up a product line consisting in off-the-shelf, ready to use Internet servers. The UIS 1xxx series was conceived as a pre-configured box covering every networking need of a small to medium, non IT oriented company: Internet connection, web hosting, email access, security, file exchange, database access, etc.

The dynamic configuration is done entirely via web and is assuming most common situations as to limit the number of parameters that should be modified by the non-specialist user.

Project: Re-designing the data processor program for AssertaHome plc. , UK
(www.assertahome.com)
Duration: 6 month
Role: Analyst Programmer with full installation of the needed software
Company: Oxygen 8 ltd, UK - (www.oxygenonline.co.uk)
Team size: 1
Used skills: Sun Solaris 2.7, Oracle 8.1.6 server on Solaris (stored procedures creation included), ImageMagik, Perl 5.6.0, DBI, DBD::Oracle, Net::FTP, Net::Telnet, etc.

- Automatically collects the real estate properties data files and images from a FTP server accessible also for the Assertahome enlisted real estate agencies.

Filters and validates text data (rejects/replaces with defaults & reports errors)

Converts the image files to the size format required by the web site

- Updates Oracle database with the text information and publishes the converted image files.

The most important gain of the re-designed program was the reduction of the running time from **20 hrs** per day to an average of **2 hrs**.

Project: "ISIS on web" searching interface
Duration: 4 month
Role: Analyst Programmer
Company: UNESCO-CEPES (www.cepes.ro)
Team size: 1
Used skills: NT 4.0 Srv, IIS 4, ActivePerl for ISAPI, CGI, HTML, JavaScript.

A special note about this project: it represents my entry point in the world of Web/Perl programming (1999).

The Micro CDS-ISIS database was created by UNESCO HQ and can be found in many public libraries however it's using Pascal and it was designed only for MS-DOS, single user access.

"ISIS on web" provided a simple way to browse and search the regional Eastern Europe ISIS database.

It used Perl and ODBC to an Access database created by an automatic export from ISIS to csv then import from csv to Access.