



VINE SOFTWARE - C.V.s

M. OAKES

Personal Details

Full Name: Martin Frank OAKES

Date of Birth: 10 August 1952

Degree Qualification: B.Sc. in Cybernetics & Instrument Physics, class 2(ii), from the University of F
1973

Summary

My career has been built on an understanding of computers' underlying operating systems and how they react with the users of those computers. Initially that lead me to become an expert in the design and use of graphic packages but more recently I have worked as a System Administrator and programming for web sites.

I have always had to administer the computers which I have used. This has been from single-user mini-computers, through administering early Unix and other multi-user computers, to now looking after several networks of mixed Unix, Linux and Windows computers.

I have used the Internet since 1987. That is as a user, writing programs to take advantage of internet protocols, writing back-end software for Internet sites and administering computers and networks which act as Internet servers and clients.

For many years I supervised and trained groups of programmers, including managing a complete software department. For most of my career I have worked closely with people from other departments and companies and I have learned to identify quickly their problems and requirements.

Employment Record

1994 to date
VINE SOFTWARE, Tewkesbury

Vine Software are software sub-contractors and consultants, specialising in Linux/Unix and the Internet. The two strands of the business are writing software and system administration.

Most of the software today consists of writing the back-end code for web sites. This is written mainly in PHP and Perl with some JavaScript and Java. I have also written some code using Jscript ASP. As well as writing the code for web sites I am frequently asked to get existing code written by others to work. Examples of code which I have written is a large Intranet written in perl and, as part of a team, a private web site to securely generate product passwords written in PHP. All of these used MySQL databases.

I also write programs in C & C++, usually working on a part of a larger project. Most of this work has been for user interfaces; in the past this was using X-Windows but more recently it has been command line interfaces.

Vine Software act as System Administrator of second-resort for several companies with UNIX and Linux networks, usually with additional Windows machines; although they also look after some Windows-only sites. This usually involves training the on-site people about System Administration to a level at which they feel comfortable handling most routine activities, with Vine Software handling the more complex, less frequent activities whilst giving telephone & email support and, where possible, remotely monitoring their network.

At many of these sites the UNIX system is acting as an Internet server, so the work has involved the configuration and maintenance of the various Internet protocol servers such as web, mail and DNS servers, including looking after Nominet tag holders; integrating the UNIX system with their existing network; configuring firewalls and other security measures; plus writing scripts and programs to monitor the performance of the overall system and to automate regular activities. This has included setting up a large mail server with full spam & virus checking and secure POP boxes, all integrated with a MySQL database.

I have a long history of configuring networks connected to the Internet and have attended "ethical hacking" courses. This means that I can secure networks and do superficial testing of network security.

I also provided Technical Support for a company selling Internet hardware and software – in particular Livingston equipment - to ISPs. This included installing and configuring their products as well as providing technical support.

1988 to 1994
K-PAR SYSTEMS, Bristol
Technical Director

K-par produce a range of UNIX device drivers and other software to access optical disc and CDROM jukeboxes.

Although I could, and did, work on all aspects of the work done by K-par, my special areas of technical responsibility were system utilities and installation procedures. These included NFS daemons and other programs to give access to the discs' special filesystems over the complete network. The programs were written in C and many included graphical user interfaces, using both X Windows and SunView.

The installation shell scripts built the K-par device drivers into the UNIX kernel and installed the programs and data files which made up the product distribution. These scripts had to be extremely resilient to handle any possible changes which had been made to the system, as well as handling the wide range of options in the Operating System's configuration files.

I also acted as System Administrator for the computer network, which consisted of a variety of Sun workstations and PCs, including some running NT. K-par has always had Internet access since we formed it in 1988.

1987 to 1988
NICHE TECHNOLOGY, Bristol
Principal Software Engineer

I was approached by the founders of Niche to join them when they set up the company. The company produced a transputer board for Sun workstations to allow straight-forward access to parallel processing. My main work was on the Sun, providing graphics, networking, i/o and other low-level UNIX services for processes running on the transputer board. Most of the programming was in C, with a little Occam.

I acted as System Administrator for the Sun network of 20 workstations including all day-to-day operations plus helping and training non-technical users on their use. This included setting up their Internet email system.

When Niche failed due to cash problems its products were bought by another company. I, and three of the other senior members of the software group, formed K-par Systems to maintain and develop the software for that company.

1982 to 1987
WESTWARD TECHNOLOGY, Tewkesbury
Software Manager

I was responsible for all aspects of firmware and software in Westward's range of graphics terminals, reporting to the Engineering Director. I set up and ran a Software Department which grew to 10 Software Engineers producing and maintaining the firmware in all the company's products. The firmware and software was initially written in 6809 and 68000 assembler, and later in C, using a Unix server. I was also involved in the design of the hardware and user-interface of new products.

As the department grew I kept day-to-day responsibility for the customer/technical support function of the department, whilst setting standards, procedures, priorities and budgets for the whole department; the day-to-day responsibility for implementing and modifying firmware was mainly delegated to senior members of my Department.

1975 to 1983
RACAL REDAC, Tewkesbury
Senior Programmer

At Redac I designed and implemented CAD packages for Integrated Circuits. Initially I supervised a group of 4 programmers to complete an existing project written in assembler on a PDP15. This product was maintained and extended by my group until work started on a successor product, which I designed. I supervised a group of 10 programmers to implement this in FORTRAN on a PDP11 under RSX.

1973 to 1975
UNIVERSITY READING
Research Student

I was sponsored by Racal Research (later to become Vodaphone) to investigate digital phase-locked loops. The research involved building the circuits and producing computer simulations of digital phased-locked loops and other oscillating circuits.

Computer Languages

My principle programming language is C (including C++), plus Perl. I am familiar with the following languages and packages:

- C
- C++
- Perl
- PHP
- HTML
- Java
- JavaScript
- JScript
- Visual Basic
- FORTRAN
- PASCAL
- OCCAM
- Assemblers for various micro-processors
- X-windows, using Motif and OLIT toolkits
- Bourne, C & Korn shells
- awk, sed, lex & yacc
- troff, etc.

Packages

- Apache
- Exim
- MySQL
- Nagios
- Samba
- Sendmail

Operating Systems

My principle operating systems is Linux. I am familiar with the following systems:

- Linux (mainly SuSE and Redhat distributions)
- Solaris for both SPARC and PC hardware
- Windows2000, 95, NT, XP, 3.x
- SunOS4 (BSD based)
- Other versions of UNIX such as BSDI and HPUX

Other Technical Information

Attended and passed with distinction a “CSTA Ethical Hacking” course run by [7Safe](#).

I was a member of the BSI Graphics Panel between 1985 & 1992, where I represented the [UK UNIX User Group](#). This was Britain's contribution to the development of International Graphics Standards.

Other Interests

I design and operate the stage lighting for many of the amateur dramatic groups in the area. I also design the lighting for performances further afield on a semi-professional basis.

I am a qualified fencing coach, and used to compete at a high level.