

RESUME

Prepared June 20, 2002.

J. Bruce Dawson

CodeMeta, Inc.
56 Whitehouse Road; Suite 5
Loudon, NH 03307
(800) 354-2209

OBJECTIVE: To effectively use my skills and resources to produce quality deliverables on time and within budget.

EXPERIENCE

Operating Systems

Linux, UNIX (Tru64, OSF/1, System V, XENIX, ISC, BSD, Ultrix), VAX/VMS, MS-DOS, TOPS-20.

Languages

C, TCL/Tk, PERL, SQL, HTML, Perl, Korn and Bourne Shell, C++, BLISS-36,-11,-32.

Applications

Oracle, MySQL, Mod-Perl, Apache, Netscape Enterprise Server, STM, HTTPD, CGI/BIN, LSM, AdvFS, CVS, GNATS, GDB, ODE-II, Make, RCS, SCCS, COHESION, ACAS, DTM, DEC/CMS, DEC/MMS, Rdb/VMS, Visual C++, TCL/Tk, TCP/IP, TCP/NFS, X, UNIX device drivers, EMACS, Optical Storage Systems, SETLD.

Machines

Compaq Alpha, Intel, VAX, Mips, Apple MacIntosh, SUN Sparc.

Networks

WWW, Internet, TCP, UDP, IP, NFS, UUCP, DECNET; Web configuration and management.

CONSULTING

Nokia Designed and implemented a java-core based test harness that is massively scalable, extensible (via JaCL), and portable to many platforms. It used the Ozone Object Database to store the various test components. The harness supported black and white box testing, load and functional testing, as well as destructive testing.

2002; Windows-NT, STAF, Java (core), OzoneDB, Solaris, TCL-Blend, Intel, Sparc, Linux.

Compaq Designed and implemented TCL-based tools for testing scalability of internet servers. Tools employed user-specified job-mix patterns for simulating loads.

2001; TCL, Linux, Tru64, Unix, Alpha, SMTP, IMAP, POP3, LDAP, HTTP, NNTP

LeaseComm Provide lead technical support to the requirements gathering and specification processes. The end result will be to port LeaseComm's existing Lease Application to the web.

2000; Perl, DBI, IIS, Oracle

NH DRED Develop and test database interface to the Travel and Tourism web site. Wrote Perl code to implement requirements and specifications. Supported numerous customer requested enhancements.

1999; BSDi, Apache, Perl/DBI, SQL (MySQL), Mod-Perl

- Vitts** Developed "point functions" to support web access to the Vitts Quoting system.
- 2000; BSDi, Apache, Mod-Perl, DBI, MySQL
- SkyWizard** Designed and installed a mail and web system for a national ISP. Delivery included standby systems, billing "glue", and demand support.
- 2000; Linux, Apache, Sendmail, POP3, IMAP, networking.
- BigYellow** Support and enhance the network supporting www.bigyellow.com - a 24x7 Web application. Included firewall administration, diagnosing and correcting network failures. Major accomplishments: splitting and moving the production network without affecting production, simplify network topology, created network for separate Y2K testing.
- 1999; Solaris, BSDi, Linux, Netscape Enterprise Server, TCP/IP routing, SNMP, FW-1.
- SupplyWorks** Performed requirements analysis for phase 2 of an internet based procurement system. Interact with customer. Included all technical business functions (support, operations, development, facilities, security).
- 1999; NT, SQL Server, IIS.
- EMPIRE** Provided on-demand systems and network support for a regional ISP.
- 1998; Digital UNIX, Radius, TCP/IP network administration.
- OMEGA** Designed and implemented a web interface for the production staff to a large Oracle-based sales compensation application. Provided general Unix system administration advice when needed.
- 1997-1998; Digital UNIX, Perl, SQL, HTTP, HTML, CGI-BIN, Oracle.
- STRAFFORD** Provide system and internet security monitoring and alerting services. Maintain and upgrade firewall on an as-needed basis.
- 1997-1998; Linux (Redhat 4.x, 5.x), firewalling, routing, system administration.
- MIS** Provide Linux support to client's customer base with emphasis on internet connectivity and WWW publishing.
- 1996; Linux (Slackware, RedHat), HTTPD, pppd, SLIP/PPP, TCP/IP, DNS, Internet routing, Unix system administration.
- STE** Designed and implemented large scalable test systems for large (> 1TB) filesystems, and Digital's Internet Products (including AltaVista). The test's primary features are scalability and fail-soft. Included requirements gathering, specification, implementation, documentation, product presentation and review. Test results and project progress were published via WWW. Provided Unix and tool support to the Systems Test Engineering group. Proposed and deployed a number of software development policies and tools for the group.
- 1995-1998; Digital/Unix, TCL, Perl, HTTPD, FTPD, LDAP, SMTP, IMAP, POP, OSF, KSH, LSM, AdvFS, WWW, NFS, ASE, Clusters.
- ECI** Designed and deployed an internet server system. The server provides access to customer composed Web pages and acts as a file server to their internal network of MS-Windows PCs.
- 1995; Linux, HTTPD, HTML, Internet, MS-Windows, NFS.
- VSL** Assisted in the design of a large (5,000+ nodes) network printing system based on Athena's Palladium. Designed and implemented the managment GUI. Set up the distributed development

- environment over WAN.
- 1994; BSDi, C, TCL/Tk, XF, NFS, CVS, IP, NFS, TCP.
- BYTE Reviewed CheckPoint's Firewall-1 system.
- 1994; Sun, Solaris, IP, TCP, NFS, UDP, PC/TCP, MS-Windows.
- Palette Created a development environment for porting a large (12K Files) graphics application from VAX/VMS to OSF/1 AXP. Also assisted in the port.
- 1994; OSF/1, AXP, VAX, VMS, C, porting, CVS, GNATS, GDB, NFS, Perl, System administration
- BYTE Reviewed and published the following product reviews: Telebit Netblazer, NAC's FASserver, IBM ThinkPad N40, Fintronic Linux. Also provide general Unix consulting to Byte Magazine.
- 1994; Networking, NFS, RS/6000, AIX, Linux, System administration
- VSL Ported TCL to DOS, include most Unix-specific functions.
- 1993; TCL, DOS, Visual C++
- CMW Performed integration of development's source code into Digital's B1 secure workstation product. Controlled building and kitting of the product (as project's Release Engineer). The product is a reimplementation of Ultrix and OSF/1 on Digital's MIPS and AXP platforms.
- 1992-1994; VAX, MIPS and Alpha AXP, ODE-II, C, Ultrix, OSF, Kitting, System administration
- UCX Implemented NFS lockd on VMS; primary goal of implementation was to interoperate with VMS Lock Manager. Also ported BSD 4.2 statd to VMS.
- 1992; NFS, VMS, Unix BSD, Ultrix, VAX, System administration
- USG Developed HFS prototype (the Habitat File System) using Sun's "Translucent File System" as a functional goal. Adapted user-mode NFS server to use .hfs_info files in target directories.
- Created an "auto-patch" tool for creating update files for entire OSF/1 source releases; tool was based on ODE-II, OSF's development environment.
- Isolated and corrected some problems in the System V compatibility libraries (habitats) by running the SVID-II and SVID-III test suites.
- 1992; NFS, OSF/1, ODE-II, MIPS
- COHESION Performed integration testing for the COHESION Framework product of Digital Equipment Corporation. Included reports to technical management and project leaders, developing test cases and writing test programs for both RISC/Ultrix and VAX/VMS. Also included interface verification between the DEBUG, SCA, LSE, PCA, COHESION, and CDS products. Some time was spent performing system management of the heterogenous network of test systems.
- 1991; ACAS, C, UCX, NFS, TCP/IP, ULTRIX, VMS, IPSE, DFS
- VSL Designed and implemented a heterogenous network consisting of an RS/6000 running AIX, 80x86's running various flavors of UNIX, and a DECstation 3100 running ULTRIX. Networks' purpose is to act as a disk server, demonstration system, test bed and general purpose resource provider to a systems integrator shop.
- 1991; AIX, C, Intel 80x86, NFS, RS/6000, TCP, ULTRIX, UNIX

- ISG** Enhanced server-side of DEC Image Express' Storage Manager to support Perceptics Optical Disk subsystem. Involved designing and implementing a "Perceptics Client" process for the server to handle both optical jukeboxes and standalone drives. Also designed and implemented an automatic regression test system for the product.
- 1991; C, Perceptics, VMS, DTM, DECNET, CMS, MMS
- OSF** Revised and implemented new tools used to build OSF/1 kernel, commands and libraries.
- 1990; C, Mips, Ultrix, Unix kernel, Make
- CROSFIELD** Member of a 5 man team that designed and implemented a multi-node, redundant Output Controller for a pre-press publishing system. Extensive use of fallback and failsoft design methodologies. Project extended to include low-cost single-node platforms.
- 1990; C, SUN, UNIX (ISC, and SUNOS), NFS, TCP/IP, SUN 3,4, Intel 80386.
- GTE** Specified and implemented a very large database system that tracks over 800,000 engineering drawings/images on an optical disk jukebox. System acts as a server to IBM PC's and SUN workstations using TCP and NFS. System was developed to be a GTE product.
- 1988; C, VMS, UNIX, TCP/IP, NFS. IBM-PC/AT, VAX 3600, Perceptics LaserWare and Jukebox.
- DECVoice** Designed a UNIX implementation of the DECvoice product.
- 1989; C, UNIX internals, ULTRIX internals.
- Kodak** (Electronic Pre-Press Publication Systems). Developed a Release Control System for all internally developed VMS software (using DEC/CMS and DEC/MMS).
- 1988; VMS, DEC/MMS, DEC/CMS, DCL, VAXes.
- ATEX** Determined missing functionality for a product in development. Analyzed and reported on the performance of a product imbedded local area network.
- 1988; 4.2 BSD, TCP/IP, Sun Workstations.
- DBS** Developed Multi-thread and Memory Management packages for the Event Performance Collector product. Integrated the product into Rdb/VMS. Provided BLISS and VMS expertise to the product's development team.
- 1987; VAX/VMS, BLISS, Rdb, VMS Internals.
- EDSVC** Taught "Introduction to BLISS" and "Advanced BLISS" courses.
- 1986; VMS internals, BLISS
- DATACARD** Ported proprietary microprocessor application development environment from Ultrix to SCO Xenix. Work resold as a Datacard/AFI product.
- 1986; Xenix, VMS, C, multi-host issues, multi-target issues.
- ISC** Tested Multi-National characteristics of IBM-PC/RT according to IBM specifications.
- 1985; AIX, IBM-PC/RT, Multinational issues.
- DAWN** Enhanced user interface for DAWN, an internally developed engineering design system.
- 1984; VMS, BLISS, User interface.

- CADMUS Initiated company's release engineering department. Specified operations such that minimal intervention was required. Brought project in under budget.
- 1984; BSD UNIX, MC 680x0, TCP/IP, NFS.
- ZTEL Specified and implemented enhancements to ZTEL's price quoting and PNX configuration program. Project completed substantially ahead of schedule.
- 1983; VMS, C, VAX.
- LSCAD Specified a project-level software support system for all CAD/CAM tools used in development/production/support of VENUS project. (VAX 8600)
- 1983; TOPS-20, Datatrieve, Management requirements, DEC-20.
- GTE Specified software development methodology for Peacekeeper (MX) missile systems.
- 1983; VMS, DCL, DEC/MMS, DEC/CMS, Testing methodologies, DOD contracting requirements, Nuclear weapons development standards (non-classified).

DIGITAL PROJECTS

The following were performed as an employee of Digital Equipment Corporation from 1977 to 1982.

- BLISS Specified, developed and supported BLISS System Interfaces and EZIO for several operating systems (RT, RSX, TOPS-10, TOPS-20, VAX/VMS).
- DEBUG Integrated VAX-11 BASIC support into DEBUG-32 (a language sensitive debugger).
- BLISS Reworked and enhanced BLISS-36 compiler backend; primarily peephole optimizer. Also devised a BLISS interface to the COMND JSYS, subsequently used in other company products.
- RAD Proposed a structured editor; subset of which was later funded and developed. Idea eventually led to DEC/LSE.
- VNX Performed feasibility study on transporting UNIX programs to VMS with new compiler and runtimes. Study led to change in marketing policy for VNX.
- VNX Performed study of Lawrence Berkeley Laboratories Software Tools as a UNIX alternative for VMS. Tools were found to be inappropriate as a product.
- MMS Specified and developed UNIX-like software for VAX/VMS (SH, MAKE, SCCS and other utilities) to make VMS functionally competitive with UNIX. Designed and co-implemented DEC/MMS, a VMS look-alike for UNIX Make.

EMPLOYERS

1987-PRESENT Principal, CodeMeta, Inc.

(Previously known as Virgin Software, Ltd.) Provide focus and direction to a company consisting of up to a dozen contract consultants.

Developed a multi-user retail system with inventory control, bar coding, rental, and services functions. Activity includes all phases of product development. Concurrently doing consulting.

Coordinate connections to various systems in the CODEMETA.COM internet domain, providing high-speed network access to companies in New Hampshire, Vermont. Access includes electronic mail store and forward, remote archiving and news feeds.

1983-1987 President, Professional Systems and Technologies, Inc.

Ported a UNIX¹ based editor (Gosling EMACS) from 4.2 Unix to VAX/VMS and MS-DOS. Product was sold by UniPress Software. Activity included all phases of product development: competitive analysis,

pricing, licensing, specification, implementation, testing, and packaging. Also provided consulting services to ZTEL, CADMUS, DEC, ISC, and Datacard.

1983 Vice-President, Software Methods Ltd.

Provided consulting services to two of Software Methods' customers: GTE and DEC LSCAD.

1977-1982 Software Engineer, Digital Equipment Corporation

Worked in Development Methods and Tools Department. See also: DIGITAL PROJECTS.

1975-1977 Programmer, University of Louisville

Supported IBM 360 (DOS), DEC 1080 (TOPS-10), and H-P 2000C (TSB). Developed computer usage database using DBMS-10. Performed consulting within the university.

MEMBERSHIPS

IEEE, ACM, Northern New England Unix User's Group, Greater New Hampshire Linux User's Group.

[End of Resume]

1. UNIX is a trademark of X/Open