

Robert Heller

51 Locke Hill Road
Wendell, MA 01379
978-544-6933
heller@deepsoft.com
<http://www.deepsoft.com/~heller/>

UNIX and Linux System Administrator

Highly accomplished technology professional with broad experience in technical support, system administration, and process optimization in educational environment. Proven track record of effective systems operations and support demonstrated through hands-on development, and maintenance of network and software connectivity applications. Able to apply innovative ideas, to solve complex problems and satisfy project needs. Skilled technology expert; able to direct multiple tasks and quickly master new technologies.

Areas of Expertise

- **Systems Implementation & Design**
- **Performance Optimization**
- **Troubleshooting & Problem Resolution**
- **Technical Mentoring**
- **Hardware/Software Purchase Evaluation**

Technical Proficiencies

- **Platforms:** VAX/VMS, SunOS, Ultrix, Irix, Linux (Slackware 3.0, RedHat 4.0 through 9, WBL 3.0 (GPL Clone of RHEL 3.0)), True64.
- **Software:** ENVI, AutoCAD, KBVision, Khoros, various open source/FSF programs (compilers mostly).
- **Languages:** C, C++, Tcl/Tk, LISP, FORTRAN, BASIC, COBOL, Pascal, Java.

Professional Experience

Linux System Admin and general Linux guru 1/2008–present Wendell Free Library
Provide on a part time, semi-voluntary basis support for the computers used by both the library patrons and the library staff. This includes keeping the Linux systems up-to-date, doing backups, and generally keeping things running smoothly.

Owner / System Administrator 12/1993–present Deepwoods Software Wendell, MA

Managed Deepwoods Software Web, Mail, and FTP server, running RedHat 6.2, RedHat 7.3, and (currently) CentOS 4.5. Deepwoods Software's server hosts a number of web sites:

- ◇ Deepwoods Software <http://www.deepsoft.com/> 2000–present, both as system administrator and webmaster.
- ◇ The Wendell Full Moon Coffeehouse <http://www.wendellfullmoon.org/> 2001–present, both as system administrator and webmaster.
- ◇ The Town of Wendell <http://www.wendellmass.us/> 2002–present, both as system administrator and webmaster.
- ◇ Celestine Press <http://www.celestinepress.com/> 2005–present.
- ◇ Francis Doughty <http://www.francisdoughty.com/> 2006–present.
- ◇ Gnomes and Fairies <http://www.gnomesandfairies.com/> 2007–present.
- ◇ Hadama Dance <http://www.hadamadance.com/> 2008–present.

In addition, Deepwoods Software has provided system installation and administration services on a contract basis:

- ◇ Aided the New Salem Board Of Assessors with wireless networking issues with a Linux-based laptop. 11/2007.
- ◇ **Installed Solaris and Linux** 1/2006–2/2006 Epistemic, Longmeadow MA
Installed Solaris 10 on a SunFire V20z server and Linux (CentOS 4) on an 4 processor AMD server.

System Administrator 1998–2000, Coyote Data Security, Leverett, MA

Managed Coyote Data Security's web and mail Linux-based server, running RedHat 5.2 and RedHat 6.2. Coyote Data Security hosted several web sites in addition to Coyote Data Security's web site, including Rector Press and Deepwoods Software's web sites.

System Administrator 9/1980–11/2005, Computer Vision Research Lab, Computer Science Department, University Of Massachusetts, Amherst, MA

Provided system administration support for a number of different systems from 1980 until 2005 on a number of UNIX and Linux desktop machines (used by graduate and undergraduate students) and several UNIX and Linux servers (file servers (NFS, Net-BIOS, and AppleTalk), web servers (Apache), mail (Sendmail) and database (PostgreSQL) servers – many of the desktop machines were also being used as servers (mostly NFS)). This included VAXStations running several versions of VMS, DECStations running Ultrix, SGI servers and workstations running Irix, Sun workstations running SunOS 4 and Solaris, and DEC AlphaStations and AlphaServers running DEC Unix / OSF / True64. The Computer Vision Research Lab was over this period a very *mixed* environment, with a number of different systems all networked together. Activities included:

- ◇ Creating accounts for students, professors, and visiting scholars. This generally involved updating the /etc/passwd and /etc/shadow files.
- ◇ Managing disk space, including setting disk quotas and watching over shared file space. Wrote several scripts to help keep track of disk usage.
- ◇ Configuring web (Apache), mail (Sendmail), and file (NFS, Samba, and NetATalk) server daemons. Wrote scripts to handle adding and removing NFS mount points as well as creating and removing file systems on the file server.
- ◇ Installing software, both at a system level and an application level.
- ◇ Performing backups, particularly for graduating (or transferring) students. Wrote several scripts to automate this process.
- ◇ Extracting datasets from various sorts of media and making these datasets available for the researchers. Often this required writing scripts to convert data files to other file formats.
- ◇ Programmed Mylex-UI, a pair pure Tcl/Tk applications (one terminal based, the other graphically based) that interface with the DAC960 RAID Driver under Linux. (see <http://freshmeat.net/projects/mylexui/>.) The Linux file server has a DAC960 RAID controller and this script was written as an admin aid to managing the RAID array. The terminal based script was strongly influenced on the DEC-supplied program used to manage the HZ70 RAID system on the previous (AlphaServer) file server.

Many of the above activities involved writing scripts in a number of scripting languages, including csh, sh, Tcl, and awk. Over the course of his time at UMass, Robert wrote

hundreds of scripts as an aid to both his programming and system administration duties.

Robert daily edited native UNIX configuration files (as native UNIX objects) for the various UNIX services running on the UNIX and Linux systems he administrated.

*Education and
Training*

- **Undergraduate Coursework in Computer Science**

University of Massachusetts, Amherst, MA

- ◇ Programming and System Modules
- ◇ Data Structures
- ◇ Computer Systems (O/S design)
- ◇ Translator Design (Compilers)

- **Professional Development**

- ◇ Show-Plane and Friends User's Manual
- ◇ Using LLVS under VMS
- ◇ Universal LLVS Plane File Format
- ◇ ISR2 User's Guide
- ◇ Home Librarian Reference Manual
- ◇ Role Playing Database Reference Manual V1.1
- ◇ Role Playing Database Reference Manual V2.0
- ◇ Role Playing Database Reference Manual V2.1
- ◇ Space Explorers

References

Professor Allen Hanson Department of Computer Science
University of Massachusetts
Box 34610, Lederle Graduate Research Center
Amherst, MA 01003-4610
Phone: 413-545-2746
FAX: 413-545-1249
hanson@cs.umass.edu

Dr. Howard Schultz, Ph.D. Senior Research Scientist, Computer Vision Laboratory
University of Massachusetts
Computer Science Department
140 Governors Drive
Amherst, MA 01003-4610
office phone: (413) 545-3482
secretary: (413) 545-2746
fax: (413) 545-1249
email:hschultz@cs.umass.edu