

# Melody Bliss

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## Familiar Operating Systems

Unix (Solaris/SunOS, FreeBSD, NetBSD, OpenBSD, Linux); MacOS (9 and X);  
Windows 2000 and XP

## Familiar Languages

Shell Scripting (ksh, sh, csh); Perl; C/C++; SQL; Visual Basic; Forth; SPARC assembler  
(v7, v8, v9 chips); x86 assembler

## Projects of Note

- Designed the system architecture for Garageband's ESD (Electronic Software Download) system in iLife '09.
- Designed a system of remotely executing scripts without the need of transferring changed scripts (as files) to remote hosts prior to execution
- Designed sections of Netli's Offload product including portions of:
  - The Origin Server Architecture
  - Purging Systems
- Designed a modular Command and Control system for Apple for their Chatterbox project, Apple's email newsletter delivery system.
- Wrote custom network monitoring tools (Solaris Environment) for VoiceNet.
- Designed and installed an alphanumeric paging system that worked directly with the network monitoring tools for VoiceNet.
- Improved efficiency at Hotmail through the creation of a custom "bless" script to verify that all components of a new machine slated for production were correctly configured. This script was written in korn shell and uses configuration files and subscripts for maximum flexibility. This was designed as a framework so that updates would be efficient. This script did the following:
  - verified symlinks and files required for applications/daemons run on the host
  - verified that partitions were mounted correctly with all options
  - verified hardware (via prtdiag on SPARCs)
  - verified installation of software and version installed (Volume Manager, Veritas File System, Legato Networker, etc)
  - verified licenses for installed software
  - verified devices were listed correctly in the device tree
  - verified that trunked/FECed ports on hosts were configured correctly

- verified Volume Manager configurations were correct
- verified that the directory structure was correct
- verified that test accounts were created correctly
- verified that the disk was layed out correctly from an OS standpoint

Initially, a bless would take anywhere from 1-3 days if all was in order. After the script was in place, this procedure could be done from beginning to end, if all was configured correctly, in under an hour. This allowed hotmail to bring up a new back-end cluster in less than 1 week including QA.

## Professional Experience

2006 – Present

Apple

Cupertino, CA

Internet Services Systems Engineer – Apple Online Store

Managed the systems, software and infrastructure for the Apple Online Store and also helped with [www.apple.com](http://www.apple.com). Daily work typically consisted of solving and dealing with time sensitive issues including product launches and releases.

Projects included creation of a centrally stored management system which allowed remote execution of management scripts without having to pre-push the script prior to execution and creation of system graphs using Cacti.

Was also a part of the iLife '09 Team. Designed Garageband's ESD (Electronic Software Download) system's architecture. Setup and configured the systems needed to support the ESD system.

2005 – 2006

Netli

Palo Alto, CA

Unix Systems Administrator – Operations

Created customer configurations for the Netli Service. In addition, debugged problems at various level including HTTP/SSL interaction, TCP/IP packets and code bugs. Also due to my background in programming and designed, was tasked to create portions of Netli's Offload product including architecture of the Origin Server and creation of the content and cache purging system that links into Netli's NOCP (Netli One Control Panel).

Other work also included creation of an automated log creation system designed initially for American Honda Motor Co. and later also used for various Offload customers. I was also the Operations representative to the weekly Engineering meeting allowing me to bring an operations point of view into design criteria.

2004 – 2005

Taos

Santa Clara, CA

Senior Consultant

Apple

Cupertino, CA

Unix Systems Administrator/Developer

Worked on various internal projects at Apple. These projects included Chatterbox (Apple newsletter delivery system), Apple's internal employee database maintenance (which included writing of new applications for synchronization between OpenDirectory and NetInfo), and Apple's mailing list software (which required debugging of an application written in an unfamiliar language [PHP]). Even though I was completely unfamiliar with PHP, due to my background in programming, I was able to debug and fix a malfunctioning PHP application within two hours.

Other work at Apple also included creation of scripts to expedite removal of users and home directories upon said users leaving the company. This included backup of the user's data in the event that restoration was needed. Previously, this was done by hand.

1999 – 2004

Microsoft Corporation

Mountain View, CA

Senior UNIX Systems Administrator - MSN Hotmail, Architecture/R&D

Directly responsible for the backup status of approximately 10% of hotmail's back-end storage (which contained approximately 25-30 million users). The backup system used was Legato Networker.

Created and ran analysis tools to detect and repair problems caused by bugs.

Managed the internal user database which handled over 300 queries/sec and over 50 updates/sec. The configuration of these machines included the usage of Veritas Filesystem (VxFS), Veritas Volume Manager (VxVM), and Sun's Online DiskSuite (ODS).

Worked with Development to create future changes to Hotmail's architecture in both software and hardware to support the current user base (100+ million users) and future expansion.

Performed Kernel Panic Analysis on Sun SPARC hosts running Solaris.

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Helped with handling Customer Service incidents involving federal and local authorities.

Kept bless-script updated with changes to hotmail's back-end configuration including changes to storage (Sun T3/T300 to EMC FC4500 and later EMC CX600). [see Projects of Note]

Created and blessed new machines that would contain user data, such as email. These machines ran an assortment of software including Legato Networker, Veritas Filesystem (VxFS) and Volume Manager (VxVM).

1998 – 1999

Collective Technologies

San Jose, CA

Senior Consultant

Contracted at Various Companies. (Names withheld due to nondisclosure agreements). Functions include backup monitoring, host maintenance and systems administration, and minor SQL Server administration.

1997 – 1998

Taos Mountain Software

Santa Clara, CA

Senior Consultant

Global Village

Sunnyvale, CA

MIS Director/IS Manager/Systems Administrator

Acted as Director of MIS managing a small team of individuals who managed the corporate Servers (running SunOS 4.x/Solaris 2.5.1, HP/UX, MacOS, NT, and Novell), desktops (Solaris 2.x, MacOS, 95 and NT), and network infrastructure (Cisco 4500 routers, 3Com and Kalpana switches).

Redesigned the corporate internal network due to downsizing and relocation.

Sun Microsystems

Mountain View, CA

Kernel Support Engineer

Acted as Technical Support Engineer doing SunOS 4.x and Solaris 2.x performance tuning and kernel core dump/panic analysis.

TravelNet (Part of the Reed Travel Group)  
Santa Clara, CA  
Senior Systems Administrator

Acted as Senior Systems Administrator until a permanent Systems Administrator was hired. Duties included configuration of email systems (sendmail), DNS (Bind 8.1.1 and Bind 4.9.6), disk mirrored servers (using Sun's Online DiskSuite tool set), minor administration of the Oracle SQL Server, and maintenance of all workstations and servers.. This maintenance included the installation of a DLT jukebox from ATL and the Budtool backup software.

Contracted at Silicon Graphics, Inc.  
Palo Alto, CA  
Global Technical Support - Specialist – Communication

Lastline (Engineering) customer support. Specializing in communication issues in relation to hardware (Ethernet, ATM, FDDI, and HIPPI), software (TCP/IP, NFS, DNS [Bind], SMTP [Sendmail]) and general networking (topology setups, status of network outages).

1996 – 1997  
Surf Network, Inc.  
Willow Grove, PA  
Senior Systems Administrator

Duties included configuration of multiple machines for several services (Mail, DNS, POP, News, Web, Authentication, Backup/Restoration), writing CGI (Web) programs for customers, SQL database administration (mSQL and Microsoft SQL server), and database design. Platforms involved were x86 boxes running BSD/OS 2.x and 3.x and SPARC running Solaris 2.x. Maintenance included adding drives to hosts, installation and configuring of the operating system, compilation of required services and system security.

1995 – 1996  
VoiceNet  
Ivyland, PA  
Senior Systems Administrator

Duties included configuration of machines for Internet related services (Mail, DNS, POP, News, Web, Authentication, and Backup/Restoration), writing CGI programs, and internal software development. Designed a network monitoring system designed to watch system uptime based on paths and page upon downtime. The VoiceNet network was a homogenous network of SPARC based boxes running SunOS 4.1.x and Solaris 2.x. Maintenance involved installation of hardware (additional CPUs, storage devices, etc.), operating system installation

and upgrades, security fixes and monitoring. Specific packages configured and installed:

- Sun's Online DiskSuite (ODS) to produce striped meta disks across multiple controllers
- INN Network News daemon
- Qualitas Post Office Protocol version 3 daemon
- Sendmail
- BIND
- Apache (Web Service)
- Netscape Enterprise Server (Web Service)
- Solstice Networker
- BRU
- Perl

1995

Unisys

Blue Bell, PA

Contracting - Compaq Windows 95 Support Project - Last line TSE

Specialized in Windows 95 networking and customer satisfaction issues at Unisys for Compaq Computer Corporation. Worked as part of the administration group internally doing systems administration and call tracking system maintenance and bug reporting. Maintained all call tracking system passwords and accounts.

1988 – 1995

THRAX Computer Solutions, Inc.

Dallas, TX

Partner - Unix system and Integration specialist

Specialized in multi-platform integration with Unix based Operating Systems. Designed solutions to meet client requirements. Under binding Non-Disclosure Agreement.

Professional Organizations
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Charter Member of LOPSA (League of Professional Systems Administrators)

Member of Usenix and SAGE

Research Experience
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1994

University of Texas at Dallas, Center for Space Sciences

Richardson, TX

Research Programmer

Created data analysis tools to gather information from the Atmospheric Explorer E to discover the seeding mechanism that cause ionospheric bubbles that cause radio communication disruption.

References Available Upon Request