

# Ken S. Bantoft

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## Experience

July 2008 - Present

Consultant/Owner - **NetFunctional Inc.**

Independent consulting helping companies design, deploy and utilize enterprise class technologies within their IT Infrastructure

Past projects have included

- Embedded Linux-based systems development for Aviation use
- Cisco VoIP migrations and upgrades
- Firewall + Secure File Transfer replacement for a Credit+Loyalty Card Printer
- Audit review and upgrade of Load Balancing deployment to include SSL+Session Support
- Deployment of Network Monitoring + Alerting systems
- Design and deployment of a centralized ECG (Cardiogram) processing system
- Several Datacenter (20-40 Servers) moves/migrations

Sept 2006 – July 2008

Infrastructure Architect – **MDS Inc.**

Responsible for designing, documenting and managing the deployment of all new major IT projects. Notable projects included:

- IT architect for a large (700 server) global consolidation + Virtualization (VMware ESX) project
- 45 site global MPLS Network migration – Technical Lead and Project Manager
- Divestiture of MDS Diagnostics Business unit (20% of the company - \$1.3 Billion divestiture) – Technical Lead role. All new IT infrastructure (AD/DNS/Email/File/CRM) was built and 2500 employees migrated during the 120 day transition period.
- Divestiture of several MDS sites – Technical Lead role, and IT contracts + Project Management
- Migration of 7 sites to Cisco VoIP solution (total of 1000 users, including 3 small call centers)
- 2 site relocations and 2 net-new site openings – Technical Lead role for all IT services.
- Many smaller projects with MDS business units for new applications, additional functionality to existing systems, and migration of applications.
- Participation in running the RFP for MDS IT Outsourcing - 12 month project to select and transition IT outsourcing responsibilities from IBM to CapGemini.

Sept 2005 – Sept 2006

Manager, Networks/Midrange/Storage – **MDS Inc.**

Provided architecture and design guidance for new projects, managed 3<sup>rd</sup> party vendors, including telecom, software and hardware suppliers. Responsible for managing the IBM technology teams for each related area, on both project and operations tasks, approving

changes related to the production environment, and acting as an escalation point for major incidents.

Feb 2005 – Sept 2005

Application Architect - **MDS Inc.**

Working with 23 different lines of business globally to determine Application requirements, design solutions, select software & hardware platforms, and manage the implementation process. Solution delivery was via IT Outsourcing arrangement with IBM – in my role I provided technical direction and project management to IBM resources to implement solutions for the MDS business units.

Jan 2004 – Feb 2005

Manager of IT, Global – **Blueprint Initiative (Mt. Sinai Hospital / SLRI)**

Blueprint was a research program based out of Mount Sinai Hospital, in Toronto that focused on Protein interaction biological data.

Responsible for the 24/7 operation of Blueprint's public databases and applications, including BIND and Seqhound. Oversight of Blueprint's IT architecture and planning for all projects. Management of IT staff, as well as interaction with all other departments within the organization. Financial management of the IT budget, as well as financial planning for future projects.

Also responsible for planning and setting up new Blueprint sites. This included facilities (space, desks, power, security) as well as IT systems.

Upon joining the organization, performed a complete audit of all Blueprint IT systems. This report provided a number of recommendations, which once approved were implemented over the next several months.

July 2003 – Sept 2007

Product Manager (Part time) - **Xelerance Corporation**

Founder of the company, which is currently the maintainer of several Open Source applications including Openswan (IPSec stack for Linux) and xl2tpd, an L2TP package.

Responsible for dealing with customers and sponsors of the projects, managing the sales team, and financial agreements. Primary contact for all North American customers for sales and support.

Openswan Project & Release Manager – responsible software release process and roadmap.

Sept 2001 - Dec 2003

Senior Systems Administrator - **MDS Proteomics**

Design, implementation and maintenance of a high throughput bio-technology research infrastructure. Built an enterprise class gigabit Ethernet network, spanning 4 sites with 2 datacenters. Also implemented two HPC Linux clusters (200 node and 100 node) for protein analysis, searching and data mining. Involved in infrastructure related projects (LDAP, Collaborative Tools, Datacenter consolidation) while maintaining the existing infrastructure.

Wrote several critical tools (Employee Whitepages, Change Management system) and continued to work closely with the software development team in an advisory role.

Apr 2000 - Sept 2001

Technical Team Leader – Linux Services - – **IBM Canada Ltd.**

Responsible for design and implementation of complex solutions using Linux, MS Windows and networking technologies (Cisco/Nortel/Foundry), as well as security and application design for custom Linux-based solutions.

Responsible for creation of several Linux based product offerings under IBM Global Services. These included a VPN (IPSec) Gateway, Webserver, Fileserver, Firewall & Mail server. Created CD Images, install sets & documentation for above. Installed IBM's Linux offerings on customer sites, as well as any other custom Linux based solutions.

Also responsible for research, testing and proof of concept implementations of emerging technologies, such as LDAP and X.25 over IP.

Jan 1998 – Apr 2000

Senior Communications Analyst – **CIBC/Intria HP**

Design, Engineering and Implementation of enterprise scale networks and network technology. Responsible for design, engineering, testing and installation of Cisco, IBM and Nortel Networks products. Lead a team of 5 people to upgrade code on Nortel Routers across CIBC's core backbone. Created detailed design specifications & documentation for new Layer 3 Switched backend network for CIBC's PC Banking system.

Operation and support of a 400+ router internetwork involving IP, IPX, DLSw, OSPF, BGP & RIP protocols. Troubleshooting complex IP and IPX routing problems over wide-area and local area networks. Problem & change management for Intria-HP's enterprise wide network. 2<sup>nd</sup> & 3<sup>rd</sup> level support for Bay Networks and Cisco Systems routers, switches and hubs. Administration of Solaris network management servers running HP OpenView, Bay Networks SiteManager, Bay Networks Optivity & CiscoWorks.

Operating Systems & Applications

Familiar with most major software packages for Microsoft Windows (all versions from 3.0 through 2003), including Microsoft Office, Visio and Project. Experience administering BSD, AIX, HP-UX, Solaris & Mac OSX.

Extensive experience with VMWare Virtual Infrastructure, doing large scale server consolidations (ESX/ESXi, and VMWare Server)

Linux & Open Source

Seasoned Linux & Unix administrator, capable of any and all administration tasks including compiling software, patching software, modification of system libraries and configuration with and without the use of GUI tools. Capable of managing filesystems on both hardware and software RAID, with IDE/SATA, SCSI & Fibre Channel devices/SAN. Focused on systems integration and automation using various technologies, applications and languages. Scripting in PHP, Perl, Python, TCL/TK, and Unix Shell.

Extensive knowledge of Linux based networking, using Linux for a router (including OSPF & BGP), firewall, and VPN Gateway (IPSec)

Current release manager for TCPDump + Libpcap – network packet capturing tools

Open Source

Extensive experience programming in Perl, PHP and most Unix scripting languages. Past

## Development

experience programming in C, C++, Pascal and Visual Basic.

Ported of various Open source applications to 64 bit platforms (Linux on S/390, Linux on IBM pSeries, Linux on Itanium, and Mac OSX)

Recent project list includes:

- Openswan - Maintainer and release manager for Openswan, an IPSec implementation for Linux. Openswan is a fork of the FreeS/WAN project (FreeS/WAN project is now abandoned).

Responsible for merging in patches for all areas of functionality, liaison to the Open Source community. Management of Openswan servers + testing systems. Also regular poster on the developer and support mailing lists, and active in the community.

- Tcpdump, Libpcap – Current release manager of both libpcap and tcpdump packet sniffing software,

## **Publications**

2006 – Feb	Building and Integrating Virtual Private Networks with Openswan – 350 pages - PackPub ISBN 1904811256
2005 – Jan	The Biomolecular Interaction Network Database (PMID: 15608229)
2003 – Oct	Linux Kongress Talk/Paper – Building Enterprise VPNs using Open Source Tools
2003 – June	Ottawa Linux Symposium Talk/Paper - Building Enterprise Grade VPNs
2002 – Oct	Highly Available VPNs on Linux

## **Education & Certification**

July 2008	Cisco Certified Network Associate (CCNA)
Jan 2001	Foundry Networks Certified Network Engineer [FNCNE]
Sept 2000	RedHat Certified Engineer [RHCE]
May 1999	Nortel Networks Certified Support Specialist [NNCSS]
Sept 1996-1998	Mohawk College, Networking & Hardware Technician Courses
Jan 1996	Graduate, Waterdown District High School

## **Courses**

Dec 2007	HP EVA SAN Management
April 2006	Lean Sigma – White Belt Training
May 2004	Bias Free Hiring Practices
Jan 2001	Foundry Networks Routing/Switching
Sept 2000	RedHat Certification Prep Course (RH300)
June 1999	Nortel Networks Advanced IP Routing
June 1999	Managing Cisco Network Security
April 1999	Nortel Networks Accelerated Router Configuration
February 1999	Nortel Networks Centillion Switching