

# Neil H. Watson

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June 9, 2010

Greater Toronto Area, <resume\_neil@watson-wilson.ca>

<http://watson-wilson.ca>, <http://www.linkedin.com/in/neilhwatson>

- Consultant, architect and leader.
- Senior (SAGE Level IV) UNIX/Linux system administrator with over 15 years of experience in manufacturing, service hosting, software development, telecommunication and high finance.
- Designs and builds forward thinking solutions that are scalable, durable and easy to maintain.
- Recognized expert in configuration management and contributor to the open source and commercial product Cfengine.

## Skills

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**Operating systems:** Solaris (6-10), AIX(5.3), SCO, Redhat Linux (RH5 to RHEL 5, Debian, SuSE (9-10), Windows (NT, XP, 2000, 2003).

**Virtualization:** VMware (ESX, GSX, Workstation), KVM, RHEV, Solaris Zones.

**High Availability:** Sun Cluster, Red Hat Cluster, Big IP F5, Heartbeat 2.

**Hardware:** HP, IBM and SUN chassis and blades, HP EVA SAN

**Coding:** Perl, Shell scripting, Sed, Awk, Subversion, CVS, HTML-Mason, PHP, SQL, HTML, CSS and C.

**Monitoring Products:** Cfengine, Openview, Insight Manager, SNMP, Sysstat, Big Brother, OpenNMS.

**Web and Middle Services:** Apache, Tomcat, Jboss, Mod\_perl, Websphere

**Network Services:** DNS/Bind, Samba, CIFS, NFS, TSM, LDAP, FTP, SSH, multipathd, DHCP, TFTP, iSCSI.

**Databases:** MySQL, PostgreSQL, SQLite, DB2, Oracle.

**Email Services:** Postfix, Sendmail, SpamAssassin, Exchange(5.5, 2000).

**Security Products:** SELinux, Iptables, Tcpdump, Wireshark, Snort, Astaro Linux, E-DMZ PAR, Ipfiler, SSL.

## Experience

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**System Administrator**                      **Symcor**                      **Contract, May 2009 - Present**

- 2000+ Red Hat, Suse, Fedora, AIX and Solaris servers.
- UNIX and Linux subject matter expert for project work.
- Clustered production high volume statement printing service. Project involved extensive engagement with vendors and business sponsors to determine the correct approach for design, deployment and future maintenance.
- Auditor approved enterprise password repository.
- Prototype Red Hat Enterprise Virtualization deployment. Symcor is a beta tester working with RedHat to deploy this service in production. As the SME working directly with the Red Hat, I am responsible for requirements gathering, design, testing and deployment of RHEV for Symcor.
- Designed, sold and deployed automated configuration management service to satisfy security auditor reporting needs. This solution scales beyond reporting to issues impacting production and regular maintenance activities with minimal effort by the service owner.
- Deployed auditor approved enterprise password repository. Currently in use by UNIX team but will scale to Window, Storage, Database and Applications teams.
- Mentor junior team members.
- Worked With: Cfengine 3, TSM, Kickstart, Subversion (SVN), NFS, Samba, Red Hat Satellite, RHEL, iSCSI, multipathd, Solaris 10, AIX 5.x, SLES, RHEV, Heartbeat 2, LVM, LDAP, Infoprint, E-DMZ.

**UNIX Systems Specialist**                      **eHealth Ontario**                      **Contract, July 2008 - October 2008**

- 1000+ Solaris and Linux servers.
- UNIX and Linux subject matter expert.

- Built and documented prototype environments for high volume emergency medical information solutions responsible for providing medical information to doctors and hospitals in Ontario in the event of a medical disaster.
- Consulted with DBA and support teams to jointly provide the best possible services and solutions through effective requirements gathering, expectations management and technical design review.
- Security consultant responsible for hardening hosts against intrusion according to government and security industry best practices.
- Planned and executed Solaris patching service windows.
- Collaborated with DBA and support teams to jointly provide the best possible services and solutions.
- Hands on experience repairing and upgrading SUN and HP chassis.
- Worked with: Solaris zones, Jumpstart, Patch Check Advanced, Websphere, Oracle RAC.

**System Administrator and Security Specialist**      **IBM, Managed Security Services**      **Contract,**  
**October 2007 - July 2008**

- Managed encrypted e-mail services for North American telco carriers in a 24/7 environment, highly available environment.
- Senior security consultant responsible for initiating a system security and compliance audit of all IBM's managed security services department in concert with industry standards and IBM's internal security policies.
- Managed Red Hat Linux and VMware ESX servers.
- Planned and executed service windows for patching and upgrades.
- Mentored junior team members.
- Worked with: Postfix, Sendmail, Tomcat, Jboss, Pound, LDAP, Oracle, Nagios, OpenNMS, VMware ESX, RHEL 4.

**System Administrator**      **Dundee Securities**      **January 2006 - October 2007**

- 400+ physical and VMware ESX virtual servers in a mixed Red Hat Linux, Windows and AS400 environment.
- Lead Linux Administrator.
- Lead Technical Architect.
- Managed and expanded one of the largest VMware ESX installations in Canada.
- Provided scalable technical solutions to streamline event monitoring for operations, resulting in significant reduction in support requests to senior technical resources.
- Designed, sold and deployed an automated infrastructure configuration management service for application deployments, systems management, disaster recovery and SOX audit compliance reporting and monitoring.
- Planned and moved the entire Linux environment, with zero downtime, during a 44 million dollar data centre move.
- Hands on experience installing, configuring and testing Qlogic HBAs attached to HP EVA SANs.
- Hands on experience in LUN creation, presentation and replication for the purpose of disaster recovery as well as daily operations.
- Hands on experience maintaining, upgrading and repairing HP chassis including blade centres.
- Responsible for providing disaster recovery planning and execution for the Linux environment.
- Responsible for managing mission critical, customer and advisor facing web services with a volume of 4 million hits per day.
- Responsible for conducting negotiations as well as vetting new solutions provided by various vendors.
- Responsible for solutions planning, executing and closing medium to large projects deemed vital by the business unit.
- Initiated consulting and collaboration meetings with other departments to provide better service and improve SLA's.
- Mentored junior team members.

- Worked with: Cfengine 2, RHEL, Red Hat Cluster Suite, VMware ESX, Tomcat, Apache, NFS, HP Openview NMS and OVO, Perl, Commvault, CVS, Subversion, DB2, HP EVA SAN, Qlogic HBA's.

**System Administrator          Voicegenie Technologies          October 2000 - January 2006**

- 150+ Linux (Red Hat and Debian), Windows and Solaris servers.
- Lead UNIX administrator.
- Honoured as VoiceGenie's most dedicated engineer at annual team building event.
- Continuously did more with less to help this dot-com startup thrive during and after the dot-bomb bubble.
- Provided superior services and support to allow VoiceGenie to have continuous growth for 6 consecutive quarters in the highly competitive voice technology industry.
- Hands on experience maintaining, upgrading and repairing HP, IBM, Sun and white box chassis.
- Provided 24/7 tier 2 customer service to demanding telecommunication carrier companies world wide.
- Designed and built email and web services to help marketing continuously reach more and more potential customers.
- Mentored product architects on Linux kernel building and maintenance.
- Mentored university co-ops on technologies and system administration.
- Introduced VoiceGenie's first production 2.6 Linux kernel.
- Introduced intrusion detection, encryption, isolated networks and other security policies and procedures.
- Authored instructional documentation for both employee and customer use.
- Authored IT security policy.
- Performed security testing and forensic investigations.
- Created disaster recovery servers and policies.
- Managed all network deployments and equipment in a mission critical, high availability environment.
- Designed and built Linux based routers and firewalls.
- Planned and executed enterprise wide network expansion.
- Worked with: Sendmail, CISCO 2600, IOS, Nortel Baystack, SCO Openserver and UNIXWARE, Red Hat Advanced Server, Debian Linux, Gentoo Linux, Solaris, MySQL, Oracle, Request Tracker, VMware Workstation and GSX Server, Bind, Snort, Samba, NFS, Perl, PHP, Big Brother, Exchange, Tomcat, VoiceXML, VMware.

**System Administrator/CAD Designer          F&K Manufacturing          June 1994 - September 2000**

- Designed and built the company's first Ethernet network.
- Designed and built the company's first wireless LAN solution to connect separate plant buildings.
- Created the company's first EDI data exchange with automotive supply chain customers to allow faster MRP planning.
- Created the company's first Internet connection using Linux to allow electronic collaboration and data sharing with customers and vendors.
- Team lead, implementation of Syspro's Encore Materials Resource Planning system.
- Authored policies and procedures to ensure initial and continuing ISO 9002 compliance.
- Drawing document controller.
- Participate in customer hosted continuous improvement councils.
- Designed production progressive stamping dies.
- Planned and scheduled the building of new dies to meet the demanding deadlines of the automotive industry.
- Worked with: Samba, Iptables, Netware, Windows NT, Red Hat and Caldera Linux, SCO UNIX Openserver, Syspro Encore, AutoCAD, Accpac.

## Education

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Loyalist College  
Belleville, ON

- Electronic Engineering Technician 1994
- Mechanical Engineering Technologist 1993

## Online Papers

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- "Intro to Automating System Administration with Cfengine 3"  
<http://www.linux-mag.com/cache/7802/1.html>
- "System repairing nanobot"  
<http://www.cfengine.org/cftimes/articles/0000000019.html>
- "Cfengine 3 tutorial"  
<http://watson-wilson.ca/blog/cf3-tutorial.html>
- "Enterprise system administration using configuration management"  
<http://watson-wilson.ca/blog/ent-sysadmin.html>
- "Cfengine Cookbook"  
<http://watson-wilson.ca/blog/cfcookbook.html>
- "Clustering with Redhat"  
<http://watson-wilson.ca/blog/db2-cluster.html>