# Richard Dobrowolski

# Senior Network Engineer - The Computer Merchant, LTD

Glenolden, PA - Email me on Indeed: indeed.com/r/Richard-Dobrowolski/54fc33222b36433d

#### WORK EXPERIENCE

# **Senior Network Engineer**

The Computer Merchant, LTD - March 2014 to Present

Client: CSC/AT&T

- Engaged as a Senior Network Engineer W-2 contractor for the Network Services Team at the CSC Newark, Delaware Data Center supporting 42 clients.
- Completed network service requests for Cisco ASA firewalls and F5 LTM load balancers.
- Installed and configured Cisco ASR 1000 router and 3750 switch at Sunguard to support CSC SAN disaster recovery network at Sunguard.
- Designed and configured multiple Nexus (7000, 5000 and 2000) scenarios to support EMC Avamar connectivity.
- Performed multiple Nexus 2000 FEX configurations.
- Supported multiple client disaster recovery tests and pre-tests.
- Performed Nexus 5000, 1000 and Brocade ICX switch code upgrades.
- Configured and installed CSC internal Brocade ICX switches to support EMC Avamar connectivity.
- Performed necessary routing changes to support redundant 10 Gb WAN connection between CSC data centers
- Follow necessary change procedures to support install, power and configure equipment in the data center.
- Attended CSC and client change meetings on a weekly basis.
- Attended client project meetings on a weekly basis.
- Generated monthly Riverbed Stealhead reports.

## **Senior NOC Engineer**

The Judge Group - May 2012 to December 2013

Client: The Vanguard Group

- Engaged as a Senior NOC Engineer W-2 contractor for the Network Operations Telcom Team.
- Completed network service requests for Cisco ASA firewalls and F5 LTM load balancers.
- Completed network service requests for sniffer traces on Cisco and Brocade switches which included configuring the Apcon device and the associated Infinistream device for the packet capture.
- Analyze the packet captures via Infinistream and Wireshark then forward the findings to the appropriate tier 3 group.
- Run and analyze Concord eHealth reports to troubleshoot network performance issue.
- Monitor Omnibus traps, journal the traps as necessary, troubleshoot and update the shift turnover.
- Monitor HP Openview NMM traps and monitor as necessary.
- Monitor NOC ticket gueue and troubleshoot as necessary.
- Monitor and troubleshoot the ATT MPLS network.
- Monitor and troubleshoot the Vanguard OPSF network consisting of Cisco Nexus 7000 & 5000 devices, Cisco 6509 & 3750 switches and Brocade MLX & FCX devices.
- Configure DHCP snooping on Brocade FCX and Cisco 3750 switches.
- Open vendor tickets with Cisco, Brocade, ATT, F5, Aruba & Bluecat and work with vendor to resolution.

- Troubleshoot network performance and connectivity issues through the F5 load balancers.
- Troubleshoot connectivity issues through the Cisco ASA firewalls.
- Troubleshoot DNS and DHCP issues via Bluecat Proteus.
- Troubleshoot Wireless issue via Aruba Airwave.
- Troubleshoot Wireless issues via the Aruba 3200 controller CLI.
- Represent the NOC on various crisis conference calls.

## **Senior Network Engineer**

TEK Systems - November 2010 to May 2012

Client: Mars

- Engaged as a Senior Network Engineer W-2 contractor for the Data Center LAN Team.
- Design, deploy and configure Cisco Nexus 7000, 5000 and 2000 kit as necessary.
- Perform NX-OS code upgrades on Nexus 7000s and Nexus 5000s in the Exton Data Center.
- Review the current code on the Cisco 6509, 6509-E, 3750, 4948 & ACE (20 & 30) modules in both data centers. Find the latest Cisco Safe Harbor code for the devices, review Cisco bug reports, review Cisco field notices and make code upgrade recommendations.
- Plan and implement ISX site cutover to BT. Included updating ACL distribute list, configuring routed Etherchannels and VLAN changes for data and voice.
- Design and implement server ILO management Cisco switch network design for Exton data center including Cisco 4948 and 2950G switches.
- Design and configure Cisco 3750 stack switch with LACP routed EtherChannels to support Exton data center disaster recovery test.
- Design and implement Solarwinds Network Performance Monitor and Netflow Traffic Analyzer in Exton Data Center to monitor Nexus, IOS and CatOS kit in both the Exton and Mt. Olive Data Centers. This project included making the necessary SNMP and Netflow configuration changes to all the Cisco devices in both data centers, and importing the devices into Solarwinds.
- Followed Cisco device decommission process which included sending work orders to DCM and the Network Management team to remove cabling, power, device, Spectrum monitoring and eHealth monitoring. Remove the device from the Magic CMDB (required change request), mark the device as spare in the DCLAN inventory, remove the QIP entry (required work order), remove the device from the Raritan console switch configuration, mark the Raritan port as spare in the Raritan spreadsheet and remove the device from Solarwinds NPM & NTA. Device adds were the reverse process.
- Standardize and implement SNMP, NTP, DNS and TACACS configurations across Cisco IOS and Cisco Nexus kit in both the Exton and Mount Olive data centers. These changes also included ACL changes on each device.
- Standardize and implement interface descriptions across Cisco IOS, Cisco Nexus and Cisco CatOS kit in both the Exton and Mount Olive data centers.
- Design and deploy VLANs as necessary including HSRP.
- Maintain IP address allocation through QIP.
- Inventory Exton data center kit and update the necessary documentation.
- Respond to team work orders and troubleshoot as necessary.
- Work with Network Management team on Spectrum and eHealth enhancements.

#### Senior Network Engineer

TEK Systems - March 2010 to October 2010

Client: Comcast

• Engaged as a Senior Network Engineer W-2 contractor for the Network Engineering Team.

- Work on change management requests for new server installs in four data centers. This includes allocating IP addresses, VLAN assignments, switch port assignments and creating the Cisco switch configurations for each request.
- Create and deploy VLANs as necessary.
- Maintain switch port allocation documents and audit switch port allocation.
- Troubleshoot new server deployments as necessary.
- Maintain IP address allocation through QIP, and request production, management and backup subnets and VLANs as necessary.

## **Senior Network Performance Engineer**

Alphanumeric Systems - February 2008 to January 2010

Client: Glaxo Smith Kline

- Engaged as a Senior Network Performance Engineer W-2 contractor for the Network Awareness Team too backfill a Senior Network Performance Engineer who was moved to a new project.
- Troubleshoot network performance issues through F5 load balancers.
- Work with other team members to arrive at appropriate F5 load balancer settings for various applications.
- Troubleshoot performance issues through the GSK EIGRP and BGP routed network.
- Respond to client SSM requests and Remedy tickets with regards to application and network performance issues.
- Troubleshoot Cisco MPLS WAN network as related to application and network performance issues.
- Add or modify Packeteer PacketShaper traffic classes to meet client needs. This would include design, change control submission, implementation and reporting.
- Generate PacketShaper and Report Center reports to identify which traffic classes were consuming the majority of the site bandwidth and take corrective actions.
- Generate Mazu traffic reports for various sites to determine who the top talkers were and report back to the client for further action.
- Generate Concord eHealth reports to determine MPLS link performance and escalate as necessary.
- Generate Lynx Netcahe reports to determine top Internet users and Internet sites that may be affecting client site performance.
- Arrange, perform and analyze WireShark remote and local captures.
- Work with application teams to deploy the Opnet ACE agents on various servers in preparation for remote packet captures.
- Execute, analyze and report on various ACE captures.
- Worked on a project with other team members to point Cisco Netflow and PacketShaper FDR traffic to the Mazu data collectors for a centralized traffic reporting solution.

# **Senior Network Performance Engineer**

Deloitte & Touche LLP - March 2005 to February 2008

- Senior Network Performance Engineer tasked with n-tier and client server application performance engagements.
- Troubleshoot network performance issues through the Deloitte EIGRP router network.
- Troubleshoot remote site performance issues through the Deloitte MPLS network.
- Utilized CompuWare Application Vantage, Network General Sniffer and the Packetstorm network simulator tools too identify the following anomalies.
- Found a 536 byte TCP maximum segment size (MSS) issue while testing a client server application. Path MTU discovery is off by default on ISA 2004 servers. Path MTU discovery was enabled on all ISA 2004 servers firm wide.

- Found excessive TCP retransmissions during download from UK datacenter to Toronto client. Found an asymmetric routing issue between the UK and Toronto.
- Tested multiple n-tier applications from Chicago to the Glen Mills, PA datacenter, and found a three second packet flight time Chicago to the Glen Mills, PA datacenter. Two Nortel switches that connect to the two Cisco VPN routers were set to auto for the speed and duplex settings. The speed and duplex settings were hard coded and the packet flight time improved to 30 milliseconds.
- Found client authentication choosing non-optimal authentication paths. Escalated the issue to the AD team for resolution.
- Found Windows 2000 servers using default TCP window settings of 17KB. Recommendation sent to the application teams to change the setting to 64KB.
- Worked with a Database Performance Engineer and found a ten second wait time between the SQL database server and the Share Point application servers. Escalated the wait time issue to the application team who then resolved the Share Point code issue.
- ERoom clients reporting excessive upload time. Ran CompuWare traces and found 170 separate SSL connections built and terminated serially for every 32KB of payload uploaded. The issue was escalated to the application team who resolved the issue with the next code release.
- Found Windows XP clients sending a payload of 8KB between acknowledgements and not utilizing the full 64KB TCP window. Worked with the server and application performance engineers and found a registry setting that can override the 8KB default setting and change to 64KB to utilize the full TCP window. The registry change increased upload speed by 600%.
- Worked with Architecture and Data Center teams to arrive at optimal F5 Big IP TCP settings which were implemented firm wide.
- Worked with team members to identify duplicated SQL procedure calls in numerous applications and escalate as necessary.
- Identified numerous HTTP errors in multiple applications and escalated to the application teams for resolution.
- Tested TCP window scaling in our lab and reported findings to the Architecture team.
- Simulated satellite VPN connectivity in our lab from West Africa and reported findings to the Architecture team.
- Ran baseline single transaction tests for numerous application upgrades and compared to the prior application version. Reported finding to the application teams.

#### **Senior Network Engineer**

The ACI Group - November 2004 to February 2005

Client: Transcontinental Direct

- Engaged as a Senior Network Engineer W-2 contractor for the Network Team too backfill an open position.
- Tasked with network projects, network security projects and daily network support.
- Designed, installed and configured multiple VLANs to support print operations at various sites.
- Converted multiple subnets too the new corporate IP addressing scheme.
- Designed, installed and configured Cisco 4506 and 3550 Layer 2 switch hardware to support building moves.
- Migrated 90+ clients off of 3COM, Intel and Nortel hardware on to Cisco 4506 and 3550 Layer 3 switches.
- Designed and configured Cisco hardware and migrated four sites to the new Frame Relay WAN.
- Planed and configured Cisco PIX 515 Firewalls, CheckPoint Firewall-1, Cisco 3030 & 3000 VPN
  Concentrators and various router & switches to support IPSec VPN tunnel print tests for multiple clients. All
  the client tests varied including VPN tunnels, Internet access, dedicated circuits and Cisco 3640 router NAT
  configuration changes.
- Responsible for planning and configuring all OSPF, EIGRP and static route changes on all company routers and Layer 3 switches.

Network consisted of Cisco 6509's with MFSC's, Cisco 4506 & 3550 Layer 3 switches. Cisco 3640, 2600, 2500 & 831 routers, various (Intel, 3COM & Nortel) hubs & switches, Cisco (3005 & 3030) VPN Concentrators, Cisco PIX 515 Firewalls and CheckPoint Firewall-1.

## Senior Network Engineer

Ajilon - April 2002 to October 2004

Client: MBNA America

- Engaged as a Senior Network Engineer W-2 contractor for the MBNA Command Center for Tier 2 and Tier 3 support in a network consisting of over 500 routers and switches in a OSPF/BGP-4/RIP routing environment.
- The Network consists of Cisco, Nortel and Cabletron hardware. Cisco hardware includes routers (75xx, 72xx, 26xx & 25xx) and switches (6509 through 1900's). Nortel BN, BCN and ARN routers. Cisco IGX ATM network connects all sites via Cylink encryptors connected to ADC T3 muxes.
- Provide Tier 1 support on SONET Verizon MAN.
- Implement scheduled configuration changes on Cisco, Nortel and Cabletron equipment.
- Implement QIP changes as necessary.
- Used HP OpenView, CiscoWorks 2000, Solarwinds, Concord Network Helath, nGenius to control Net Scout Probes (ATM, FDDI, Ethernet & Toke Ring) and Network Associates Sniffers (Ethernet, Gigabit Ethernet, Token Ring & FDDI) to monitor and troubleshoot network issues.
- Provide Tier 1 support for Check Point Firewalls.
- Maintain network documentation.

#### **Senior Network Consultant**

Main Line Contract Services - November 2001 to March 2002

Client: SPX

- Engaged as a Senior Network Consultant W-2 contractor for the Network Team to provide network engineering and project management tasks.
- SPX is a holding company that acquired another holding company called UDI. The acquisition added 20 business units and 120+ sites to SPX.
- Preformed tasks including project management, planning, coordinating site turn up with business units and site IT staff, ordering telco services (T-1, Frame Relay PVCs, ISDN Bri & ISDN Pri), generating quotes for backup solutions, ordering Cisco and Nortel hardware from the VAR, configuring Cisco routers (2600, 2500 & 4000), configuring Nortel ARN routers, configuring Nortel Connectivity 100 VPN Appliances for IPSec tunnels, troubleshooting installations, implementing new IP address scheme and migrating business units over to corporate DNS/DHCP services via Nortel NetID.

# **Network Management Engineer**

Thrupoint - September 2001 to November 2001

Client: ACH, MBNA, Provident Mutual and Sunoco

- Installed and configured CiscoWorks 2000 and Net Scout nGenius software on multiple network management engagements.
- Installed and configured Nortel Passport 6400 Manager, Cisco QoS Policy Manager and Cisco Voice Manager.
- Trained clients on the above tools.

## **Senior Network Consultant**

Netigy - December 1999 to September 2001

Clients: Aehter Systems, Chemical Week, Comcast, Corio, Davies Turner, Digex, E-Sylan. Light Guide, Merk-Medco, NCO, SBC, Sprint, Sylvan, Synopsis, Togus and WABC.

- Involved in network consulting and project management on multiple network infrastructure and network management engagements.
- Installed and configured HP OpenView NNM and CiscoWorks 2000 on multiple engagements. Trained clients on HP OpenView and CiscoWorks 2000.
- Designed and implemented an IP addressing scheme, as well as various switched and routed solutions for clients
- Assisted with pre-sales by attending multiple sales calls, writing SOWs and proposals.
- Mentored several junior consultants on infrastructure and network management topics.

# Internetworking Consultant

RPM Consulting/EB Networks - December 1998 to November 1999

Client: PSE&G Nuclear Business Unit

- Worked on Year 2000 project assessing and testing the following Unix platforms: AIX 3.2(5) on RISC 6000 550L & R20 servers, HP-UX 10.20 on HP 9000 C110 & C160 workstations, Solaris 2.6 on Sun Ultra2 & Sparc5 workstations and DEC Utlrix 4.4 on Digital Aphastation 200.
- Completed Year 2000 assessment for 70 other devices including IBM, Cisco, HP, DEC, Bay Networks and Storagetek.
- Assisted with NT Year 2000 server and workstation upgrades.
- Designed and implemented Fast EtherChannel between Cisco 5500 switches.
- Designed and implemented HSRP between Cisco 7513 routers.
- Installed and configured Cisco 2600 routers and 2900XL switches in multiple campus locations.
- Supported NOC with Tier 3 problem resolution for Bay Networks 5000 hubs (FDDI, Ethernet & Token Ring), Synoptics 3000 & 3030 hubs (Ethernet & Token Ring) and EIGRP routing issues.

## **Network System Engineer**

International Network Services - February 1998 to November 1998

Client: Smith Kline Beecham Pharmaceuticals

- Worked on Year 2000 compliance network management project which included program plan, development, assessment and testing for the following: HP-UX 10.20, HP OpenView NNM, CiscoWorks, CiscoView, Optivity, DEC ClearVisn, Nervecenter, Network Health and Etherpage.
- Implemented test network management system on a HP 900S715/100 running HP-UX 10.20.
- Designed and installed a test network to prepare for the network management Year 2000 testing.
- Obtained the licenses and patches to build the test network management platform for the software listed above.
- Documented the project in multiple product books; including test plan, validation and test results.

# **Network Engineer**

JP Morgan Services, Inc. / CSC - December 1985 to February 1998

- Worked on the Network Management Team from July 1996 to February 1998.
- Worked as a Team Lead in the Customer Assitance Center from July 1993 to July 1996.
- Worked on the Tech Control Team as a Datacomm Engineer from December 1985 until July 1993.
- JP Morgan outsourced 33% of IT to CSC during July 1996.

### **Shift Supervisor**

Electronic Data Systems - October 1984 to December 1985

Client: Naval Aviation Supply Office

- Responsible for first shift computer and network operations in an IBM 3081, 4381, MVS and 3705 environments. Directed the daily activities of six computer operators.
- Involved in planning for an upgrade to IBM 3090 MVS/XA system and an IBM 3725 FEP.
- Completed extensive system and network training.

# **Console Operator**

Fidelity Mutual Insurance Company - November 1983 to October 1984

Controlled second shift batch throughput on an IBM 4341 MVS system. Function as shift supervisor in absence of the supervisor. Assisted in the tape and pint areas as needed.

# **Computer Operator**

International Business Machines - May 1980 to November 1983

Worked in the following datacenter areas on a two week rotation: print, tape, batch master consoles, production master consoles, wideband and System 38.

**EDUCATION** 

# **Associates in Computer Science**

**Delaware County College**