

## HIGHLIGHTS

Over 13 years in computing and IT with the last 9 years in networking area. Excellent troubleshooting and configuration of complex infrastructure.

Extensively worked on infrastructure integration, optimization and automation using various networking vendors and tools.

## SKILLS SUMMARY

Network and Security Engineer

- General networking: routing, switching and multicast
  - General security: GRE, IPsec, IPv6IP, QinQ
  - Hardware platform: x86, x86\_64, SPARC, Mac/Apple
  - High availability and redundancy: HSRP, VRRP, HA, HPCC, cluster, grid
  - Linux: kernel fine tune, system troubleshooting, custom-made system from source
  - Multicast: PIM, IGMP, MSDP, VoD
  - Network addressing: IPv4, IPv6, IPX, AppleTalk
  - Network management: OpenView, Spectrum, Rancid, cacti, nagios, opennms, SNMP, altiris
  - Network traffic monitoring: traffic analyzer, sniffer, ethereal, snort, prelude, tcpdump
  - Operating environment: win32, UNIX, Linux, Solaris, AIX, OS X
  - Layer-2 technology: VLAN, spanning tree, LACP, etherchannel
  - Routing protocol: OSPF, BGP, RIP
  - Security policy, including: security ACL, site-to-site VPN (LAN-to-LAN), VPDN
  - Security prevention and detection: IDS and IPS
  - Software security: antivirus, ACL, antispam
  - Storage: SAN, NAS, DAS, FC, HBA
  - Traffic engineering: OSPF-TE, mBGP, proxy, cache, masquerading, NAT, PAT
  - Vendor: Cisco, Nortel, Check Point, HP, Dell, Juniper Netscreen, Digium, NetApp, SUN, EMC
  - Virtualization: VMWare ESX, VMWare Server
  - Voice: asterisk, call manager
  - Web platform: IIS, apache, squid
  - Web services: DNS, SMTP, POP, HTTP, HTTPS
  - Wide-deployment Linux: Gentoo, RedHat, Mandriva/ Mandrake, SuSE, Debian
  - Wireless: 802.11a/b/g/n, WEP, PSK, WPA, 802.1x, TKIP
  - Traffic generator and test: IXIA, Smartbits (Spirent)
  - Database: Oracle, MySQL, MS SQL server
- Computer language/script
- C
  - perl
  - shell, bash, tcsh
- Troubleshooting and Analytical
- Able to understand any size of complex diagram and code within short period of time
  - Ease of understanding of new hardware and software environment to meet company/ customer's demand in short time period
  - Quick and proactive problem solver and optimization
- Technical Implementation
- Strategic implementation and deployment of technical projects in coordination with various party's technical and non-technical team member
  - Deep understanding of technical documentation. Ability to create documentation to serve technical and non-technical users.
- Customer Service
- Meeting client's requirements

- Good verbal and written communication
- Good presentation skills

### EDUCATION AND PROFESSIONAL CERTIFICATIONS

1994 –1998	Bachelor of Science in Computer Science (Information Technology) Universitas Bina Nusantara, Jakarta, Indonesia
December 2006	Certificate IV in Assessment and Workplace Training (Australia)
May 2006	CCIE Routing and Switching written (350-001)
May 2006	Certified Cisco Academy Instructor (CCAI)
December 2002	CompTIA Network+
December 2001	CompTIA A+
December 2001	Cisco Certified Network Associate (CCNA)

### PROFESSIONAL EXPERIENCES

Oct 2007 – Present	Nortel Networks, Santa Clara, USA R&D System Test Engineer
Apr 2007 – Oct 2007	Commander Australia Limited, Melbourne, Australia Network and Security Engineer for Commander Managed Services
Jun 2006 – Apr 2007	Volante Systems (now part of Commander Australia Limited), East Bentleigh, Australia Network and Security Engineer for Volante Managed Services
Mar, Jun 2007	Brooklyn Technology Services, Sydney, Australia AIX Upgrade projects
Mar 2005 – Dec 2007	RMIT University, School of Life and Physical Sciences, Melbourne/ Australia TAFE teacher and Cisco instructor
Feb – Jun 2006	IPN Managed IT Services, Melbourne, Australia Senior System and Network Engineer
Nov 2000 – Dec 2004	Curtin University of Technology, Sarawak, Malaysia Acting Head of IT Department, IT Technical and Network Officer
Oct 1998 – Jul 2000	Bina Nusantara High School, Jakarta, Indonesia Senior Network Administrator, Information Systems Teacher

### PROFESSIONAL EXPERIENCE DETAILS

Company: Nortel Networks

Project: Vancouver Olympics 2010                      Period/Duration: Jun 2008 – current

System test for Vancouver Olympics 2010 event. Tasks include setting up test bed, design and execute test cases, provide feedbacks to VANOC as needed.

**Environment: Passport 8600 ERS, Passport 5500, Passport 1600, ERS 25xx, ERS45xx, Linux (automation script), cacti (NMS and SNMP poller/walker), SmartBits traffic generator, IXIA explorer, IXIA router, IXIA network, rancid (poller script for config diff), ethereal, tcpdump**

**Technology: BGP, OSPF, BGP, RIP, static route, VLAN, VLAN trunk, STP, MSTP, RSTP, HA, MLT, SMLT, RSMLT**

Company: Nortel Networks

Project: Passport 8600 ERS rel 5.0 white                      Period/Duration: Jun 2008 – current  
paper

Prepare white papers for Passport 8600 ERS release 5.0. White papers covers new features in release 5.0 focusing on MPLS feature being tested in previous project (please see below)

**Environment: Passport 8600 ERS, Passport 5500, Passport 1600, Juniper M Series, Cisco 7200, Cisco GSR, Linux (automation script), cacti (NMS and SNMP poller/walker), SmartBits traffic generator, IXIA explorer, IXIA router, IXIA network, rancid (poller script for config diff), ethereal, tcpdump**

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**Technology: MPLS LDP, IPVPN, MP-BGP, OSPF, BGP, RIP, static route, VLAN, VLAN trunk, STP, MSTP, RSTP, HA, MLT, SMLT, RSMLT, VRF**

Company: Nortel Networks

Project: Passport 8600 ERS rel 5.0                      Period/Duration: Mar 2008 – Jun 2008

System validation test for IPVPN (RFC2547/4364), MP-BGP and MPLS TE through test case design, execution and validation from customer's topology.

**Environment: Passport 8600 ERS, Passport 5500, Passport 1600, Juniper M Series, Cisco 7200, Cisco GSR, Linux (automation script), cacti (NMS and SNMP poller/walker), SmartBits traffic generator, IXIA explorer, IXIA router, IXIA network, rancid (poller script for config diff), ethereal, tcpdump**

**Technology: MPLS LDP, IPVPN, MP-BGP, OSPF, BGP, RIP, static route, VLAN, VLAN trunk, STP, MSTP, RSTP, HA, MLT, SMLT, RSMLT, VRF**

Company: Nortel Networks

Project: Passport 8600 ERS rel 4.2                      Period/Duration: Oct 2007 – Mar 2008  
transition to 5.0

Platform and feature verification of IPVPN (RFC2547/4364), MP-BGP, and MPLS TE through test cases execution, design and validation.

**Environment: Passport 8600 ERS, Passport 5500, Passport 1600, Juniper M Series, Cisco 7200, Cisco GSR, Linux (automation script), cacti (NMS and SNMP poller/walker), SmartBits traffic generator, IXIA explorer, IXIA router, IXIA network, rancid (poller script for config diff), ethereal, tcpdump**

**Technology: MPLS LDP, IPVPN, MP-BGP, OSPF, BGP, RIP, static route, VLAN, VLAN trunk, STP, MSTP, RSTP, HA, MLT, SMLT, RSMLT, VRRP, VRF**

Company: Commander Managed Services              Client: Loreto Mandeville Hall School

Project: Wireless LAN Deployment                      Period/Duration: Jul 2007 (2 weeks)

Design, test and configure Cisco Wireless LAN controller 4400 with Cisco Lightweight Access Points. Prepare, test and configure 3Com switches from flat subnets into several VLANs for WLAN controller subnet partitioning.

**Environment: Cisco WLAN Controller, Cisco Access Points, 3Com Switches, Windows Server 2003, Blue Reef Sonar (firewall)**

**Technology: VLAN, 802.11a/b/g, WPA2, DHCP, DNS, Active Directory**

Company: Commander Managed Services              Client: iVigilant

Project: VPN link transition                              Period: Jun – Jul 2007 (8 weeks)

Transition VPN link from old site to Commander Managed Service (CMS) office in Melbourne.

Re-design, prepare, test and configure VPN links from CMS office to iVigilant clients. The previous VPN link was setup to provide technical support from old site. This transition's purpose is to relocate support staff from old site to CMS office. The relocation is part Commander's acquisition of Volante Systems.

**Environment: Cisco 800, Cisco 2600, Cisco 3600, Cisco PIX, Cisco ASDM, VMWare ESX**

**Technology: L2L VPN, 3DES, SHA, Active Directory, static routing, NAT**

Company: Commander Managed Services              Client: Commander Managed Services

Project: CMS infrastructure and                              Period: Jun 2007 – Oct 2007  
virtualization

- Design, configure, test and maintain CMS virtual infrastructure using VMWare ESX.
- Configure, test and deploy VMWare ESX guest OS running CentOS, Fedora Core and Windows

Server 2003.

Windows 2003 server is the prerequisites of 'Transition VPN link from old site to Commander Managed Service (CMS) office in Melbourne' project.

CentOS and Fedora Core is deployed for Network Management System (NMS) running cacti and nagios. The initial setup was using Fedora Core test box with manual configuration from cacti repository. As the VMWare ESX is ready, the production is changed using CentOS from Cacti team. Further configuration and fine tuning involved modifying web scripts.

Install and configure RANCID for managing CMS device backup configuration and changes repository. RANCID scripts also being used for performing several test and automation tasks.

Some minor tasks involved: create a self-service web-page to cater CMS service desk monitoring request automation, create a projected disk usage from data polled from cacti.

- Assist level-1 and level-2 service desk for CMS daily operations related to CMS infrastructure. i.e.: SSL access, VPN permission, MAC (modification, addition and change).

**Environment: Cisco 800, Cisco 3600, Cisco Catalyst 35x0, Cisco Catalyst 6500, Cisco PIX, Juniper NetScreen, Juniper SSL VPN, VMWare ESX, Linux, Windows Server, apache, mysql, nagios, cacti**

**Technology: SSL VPN, SNMP, tcl/expect, perl, php, http, smtp, dns**

Company: Brooklyn Technology Services      Client: Melbourne City Council, Hardy Industries

Project: AIX Upgrade      Period: Mar 2007, Jun 2007 (weekend work)

AIX upgrade for EMC PowerPath and Navisphere.

**Environment: IBM AIX, EMC SAN**

Company: Volante Systems (now part of Commander)      Client: The Salvation Army/ Employment Plus (TSAEP)

Project: Transition IDS sensor from Volante to TSAEP collocation      Period: Mar 2007 (2 weeks)

Prepare, configure and test Cisco IDS sensor and IDS manager prior and after the relocation to TSAEP collocation.

**Environment: Cisco IDS sensor, CiscoWorks IDS manager**

Company: Volante Systems (now part of Commander)      Client: The Salvation Army/ Employment Plus (TSAEP)

Project: Server and Network transition      Period: Feb - Mar 2007 (8 weeks)

- Prepare, configure and test network link prior and after the relocation to TSAEP collocation.
- Liaise with the collocation services for firewall rules, VPN site-to-site, BGP routing that will be updated after the collocation network is in place.
- Update and evaluate network diagram to reflect the changes.

**Environment: Cisco Router 2600, Cisco PIX, Cisco IDS, CiscoWorks IDS Manager**

**Technology: DNS, http, VPN, BGP routing**

Company: Volante Systems (now part of Commander)      Client: Daimler Chrysler Australia (DCAuP)

Project: Transition of managed infrastructure      Period: Jun – Dec 2006

This project is transition from Managed Service of Network and Security of DCAuP to ITS Singapore. ITS Singapore is Daimler Chrysler Asia Pacific's centralized IT team.

- create network diagram for DCAuP country-wide operations.
- configure, test, deploy and maintain Network Management System using cacti and RANCID. Cacti was used as link monitoring. RANCID was used to keep configuration repository and in preparation

of automation configuration changes prior to hand over to ITS Singapore.

- liaise with telecommunications carrier company for DCAuP in-country WAN, site connectivity, network alerting and monitoring.
- assist level-1 and level-2 service desk/ engineers for daily operations of DCAuP managed services.
- assist level-3 AIX and Windows engineer in relation to network-related tasks.

**Environment: Cisco Catalyst 29x0, Cisco Router, NetApp NetCache (now Blue Coat proxy), HP ProCurve switches, IBM AIX, Windows 2003, gentoo Linux, apache, cacti**

**Technology: dns, dhcp, smtp, Active Directory, http**

Company: RMIT University – School of Life and Physical Sciences

Position: TAFE Teacher

Period: Apr 2005 – Dec 2007

Cisco Network Academy Program instructor and academy equipment manager.

Computer Science course developer, instructor and coordinator.

Conducted class:

- CCNA
- IT Essential (seasonal)
- C programming
- Database design and concepts
- Introduction to IT
- Foundation Studies in Computer Science

**Environment: academic**

Company: IPN Managed IT Services

Client: managed services client

Position: Senior System and Network Engineer

Period: Feb – Jun 2006

- Back-end support and solution provider.
- Internal technical trainer.
- Improving system efficiency for technical support call process.

Details of duties and responsibilities:

- Design, configure, maintain and upgrade customer's network using Cisco 800 series.
- Network management using Spectrum, Rancid and MRTG.
- IP Address assignment allocation and routing.
- VPN and tunnel setup between clients and/or client to Data Centre.
- System administration for Windows Server, Exchange Server, Active Directory, Solaris, Windows Terminal Services.
- System and network security using RADIUS, site-to-site VPN and tunneling, remote access and system hardening.
- Client's remote backup service through network backup over WAN.
- Disaster recovery using multiple snapshots and full image restore.
- Maintain centralized technical documentation for future reference using Sharepoint.
- Maintain, upgrade and troubleshoot managed client hosting for www, mail, application and file services.
- Manage Storage Area Network (SAN).

**Environment: Cisco 800 router, Compaq StorageWorks, Compaq DL-series servers, MS Exchange, Windows Server, SUN Solaris, RANCID, mrtg**

**Technology: Technology: VPN, IP in IP, SAN, Active Directory, static routing, RIP, apache, SMTP**

Company: Curtin University of Technology, Sarawak

Position: Acting Head of IT Department      Period: May – Dec 2004

Added responsibility as head of department that includes:

- IT staff management: welfare, conflict resolution, daily operations, tasks delegation, staff development.
- Liaise with other Head of Departments for IT needs and support.

**Environment: managerial**

Company: Curtin University of Technology, Sarawak

Position: IT Technical and Network Officer      Period: Jul 2001 – Dec 2004

- Campus system and network design, implementation, deployment, maintenance, upgrade and optimization.
- Inter-department technology and communication integration.
- Vendor liaison for budget formulation and deliveries.
- Ongoing IT strategic and financial management and implementation.

Details of duties and responsibilities:

- Responsible for Curtin – Sarawak Malaysia (CSM) network infrastructure. Designing, installing and maintaining CSM network infrastructure using Cisco Catalyst switches and Routers. The current wired network has also been extended with WLAN solution using Cisco Aironet series with cross-brand Wireless Client Access Network Card.
- Responsible for CSM network security infrastructure based on Cisco PIX Firewall and Cisco Secure User Registration Tool Series with VMPS for managing dynamic VLAN assignment in the Campus Network environment.
- Responsible for CSM telecommunication infrastructure. Maintaining all telephony connections for analogue and digital lines through PABX.
- Responsible for CSM Network Management using Cisco Works Network Management, nagios, HP WebJetAdmin, DELL OMCI, DELL OMSA, DELL OMAM and also DELL PowerConnect Network Management suites.
- Planning and developing CSM ICT infrastructure including baseline performance monitoring, users growth and annual budgeting.
- Responsible for any technical aspects of CSM that involved directly with any ICT infrastructure. This includes: Building Management System, Card Access Management System, Liaising with the Campus Service Department for the Fire Control computer system, and Main Lecture Theatre Audio-Visual facility.
- Managing Local and Wide Area Network traffic policy. Including: multicast traffic, network security and bandwidth control/shaping.
- Maintaining network connectivity for Local Area Network (LAN) and Wide Area Network (WAN). Giving report to IT Administrator about the possible maintenance activities to enhance network performance to its optimum level.
- Maintain, test and update Library OPAC (Online Public Access Catalogue) system in liaison with OPAC team in Kuala Lumpur. The OPAC system is running under Universe framework in SUN Solaris Operating Environment.
- Helping users troubleshoot any computer-related problems that might occur during daily activities.
- Keeping record of CSM network activities.
- Creating and maintaining Network Policy, Security Policy and User Access Policy.
- Installing Linux as the core network connector for Internet Proxy and Cache server. Various Linux distributions using kernel 2.0 until 2.6.



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IMAP using Dovecot  
mail server

SMTP using Postfix

Linux kernel 2.6 fine  
tune, mainly using  
gentoo

Apache and apache  
virtual servers

Spam filtering using  
spamassassin

Automated backup  
using scripts

Logical volume and  
RAID

Dynamips (cisco router  
simulator) running IOS  
for 7200, 3800, 3600,  
37x5, 2600