



Trained
and tested
to provide
superior
NetWare
Support.

MARK W. SWARBRICK

Certified Novell Engineer / NT/2000/2003/2008 Network Engineer / Internet Security / Software Development

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AREAS OF SPECIALITY

Novell 2X, 3X, 4X, 5X Networks	Windows NT Server (Ver. 3.x, 4.0, 2000, 2003, 2008)
Shell Scripts, Tcl/Tk Programming	DOS, OS/2,, Windows 3x/9x/XP/2000/2003, Windows 7
Cisco Routers	Internet / Network Security
TCP/IP, WINS, DHCP, DNS	Communications Software
Linux, Unix , Sendmail	Teaching/Management/Leadership
LAN/WAN, Remote Connectivity	Firewalls on Linux, Unix, NT & Novell
Auto Fail-Over Standby Servers	PC Hardware, SCSI, Raid

REFERENCES

Wells Fargo Bank	William Smith	480-394-4871 (Wk)
AZ Dept. of Environmental Quality	Bill Cliver	602-502-3002 (Cell)
U.S. Dept. of Commerce/Census Bureau	Philip Alexander	602-943-0292 (Hm)
U.S. Dept. of Commerce/Census Bureau	Steve Kostiw	602-404-4857 (Hm)
Az Attorney General's Office/D.O.T.	Brian Bolland	602-439-0298 (Hm)
Bank One of Arizona	Paul Kosednar	602-812-9502 (Hm)
Bank One of Arizona	Mike Levy	602-221-2101 (Wk)
Bank One of Arizona	Kathleen Anable	602-221-1883 (Wk)
AT&T	Debbie Pryor	602-285-6353 (Wk)
AT&T	Mike Eisenman	916-489-9049 (Wk)

Personal Statistics: Age: 54 Letters of Reference & Certificates available upon request.

EDUCATION & TRAINING

CHANDLER – GILBERT COMMUNITY COLLEGE, Chandler, AZ
Cisco CCNA Program: TCP/IP Networking, Wide Area Networking, Network design,
Router theory and practical hands on training of configuring Cisco routers.

TRAINING SOLUTIONS: A NOVELL AUTHORIZED EDUCATION CENTER, Tempe, AZ Completed
Certified Netware Engineer (CNE) training course. This involved hands on training with all versions of
Netware. Installation and troubleshooting of network systems was covered in detail. After three months
of full-time study, I passed all seven tests required by Novell for CNE certification.

GENERAL MOTORS SCHOOL OF PRODUCT SERVICE, Tempe, AZ
Computer Command Control system analysis and repair. Three courses of training completed in the
diagnoses and repair of General Motor's On-board Vehicle Computer Systems.

NEW MEXICO JUNIOR COLLEGE, Hobbs, New Mexico.
Basic programming and program flowchart design.

SELF STUDY - I have been involved with computers as a serious interest since the early 1980's. I have
done extensive independent study in such areas as IBM PC architecture, programming, MS-DOS, memory
management, multitasking, telecommunications, Novell network systems and PC system troubleshooting
and repair.

UNIVERSITY OF ILLINOIS, Champaign, Illinois
Commercial Pilot Training Program, Electronics, Aircraft Mechanics

DIXON HIGH SCHOOL, Dixon, Illinois
Completed three full-year electronics courses: Basic Electronics, Advanced Electronics, Solid State
Troubleshooting

BEREAN COLLEGE OF THE BIBLE, Springfield, Mo
Ministerial Studies & Church Administration. Program included training in team management, business
management, counseling, effective teaching and communication skills.

CERTIFICATES

NOVELL CLASSIFICATION LEVEL - *Certified Netware Engineer*

NOVELL EDUCATION CERTIFICATES -

- * System Manager, Ver 2.2
- * Advanced System Manager, Ver 2.2
- * Operating System Features Review, Ver 3.11
- * Introduction to Data Communications
- * Network Service and Support

MICROSOFT EDUCATION CERTIFICATES

- * Internetworking with Microsoft TCP/IP on Windows NT

GENERAL MOTORS TRAINING CENTER -

- * Computer Command Control Engine Performance
- * Computer Command Control Carburetors
- * Computer Command Control Driveability Diagnosis

**PROFESSIONAL
EXPERIENCE**

Swarbrick Software, Inc.

President & CEO March 2000 – Present

Software Development & Marketing – See: www.sosstandbyserver.com

- * Write software to function as a standby failover server for Windows file servers.
- * Integrate above software into Windows & Linux, allowing standby server to provide failover services for Windows servers.
- * Write and market software to function as drive imaging software for any operating system.
- * Provide technical support for world-wide clientele who have purchased software
- * Provide PC support and networking services to local business clients.

LECOM Computer Services, LLC

June 2004 To Present

Field Engineer

- * Service calls to business clients
- * General Network, Server and Desktop Support
- * Exchange Server, 2003 Server, Firewalls, Routers
- * Standby Fail-Over Server Installation & Support

IBM Global Services

Contract (GCI) February 2004 To Project Completion: June 2004

Network Engineer – Server Management Team At Honeywell.

- * Write Documentation For Build Procedure for Install of Microsoft 2003 Servers.
- * Script Program To Transfer Files From DMZ Servers Via Port 22.
- * Assist With LANDesk Rollout.
- * Apply Honeywell Security Policy To LANDesk Servers.

IBM Global Services

Contract (GCI) August 2003 To Project Completion: December 2003

Technical Resource – Network Migration Project At Honeywell.

- * Serve as technical resource on project team assigned to rename all NT & associated Novell accounts in the Honeywell domain at Honeywell.
- * Write scripts and programs in NT Shell Script, TCL/Tk, & Final Developer to automate the rename of thousands of user accounts. These programs performed the following functions:
 1. Perform Pre-Run Test to Gather Information on Targeted Accounts.
 2. Perform Post-Run Test To Report Success of Rename Run.
 3. Auto Rename NT & Novell Accounts, Home Directories & Send Email
 4. Create log files from all pre, post and rename runs and scan these log to retrieve information on any user.
- * Configure IIS on 2000 Server. Build web page to allow remote users in our database to rename their own accounts and receive the cached credential registry update via a dial-up connection.
- * Write documentation manual for all programs and web site.
- * Handle support calls from end-users.

Wells Fargo Bank

Contract: Contracted from Direct Fit to Wells Fargo Bank

Contract – October 2000 To Project Completion: March 2000

NT & IIS Security Analyst

- * Review implementation plans for E-business solutions and examine for security issues and make recommendations
- * Write program in Tcl/Tk to automatically scan registries, report services running and port scan and compare settings to recommended security settings and report any insecure settings.
- * Monitor E-business applications and verify that bank security policies are followed.
- * Write security monitoring programs in Tcl/Tk and Unix shell scripting
- * Compile C programs on Linux for SSL connectivity to secure web servers.

American Express

Contract: Contracted from Maxim Group to American Express

Short Term Temporary Contract – September, October 2000

Unix Scripting

- * Write Unix shell scripts on Solaris and Linux to assist with Unicenter Rollout.

Honeywell

Contract: Contracted from CDI Information Technology Services to Honeywell

Contracted from July to August

Firewall & Internet Security

- * Part of two-member firewall team – responsible for configuration and maintenance of Checkpoint Firewall-1 on Sun Solaris and Interlock proxy servers on Sun Solaris.
- * Adjust firewall rules as necessary for Honeywell business needs worldwide.
- * Handle trouble ticket incidents involving connectivity issues that pertain to the firewalls.
- * Investigate and do reconnaissance on Internet spammers sending spam mail to Honeywell. Contact InterNIC and Registrars and ISPs relative to offending domains.
- * Investigate and test email servers at Honeywell to assure we can't be used as a mail relay for spam mail.
- * Investigate trouble tickets involving wide area network connectivity issues and trace to point of failure and refer ticket to proper network group with recommendations for resolution.

Arizona Department of Environmental Quality

Contract: Contracted from KGV Consulting to ADEQ

Contracted from April to Project Completion: June 2000

Internet / Network Security Consultant

- * Analyze Internet and network inbound and outbound security and submit a written report of my findings and recommendations. Network Environment: Windows NT, Novell 5x, Sun Solaris Unix & Linux.
- * Assessment of firewall: Checkpoint Firewall-1 on Sun Solaris (SunOS 5.6). Examined firewall rules for proper configuration. Examined firewall logs to investigate prior Denial of Service attacks. Recommended configuring perimeter firewall to disallow ICMP echo requests and replies to prevent SMURF attacks from targeting hosts on network. Ran Traceroute and VisualRoute to trace Denial of Service attacks to hosts in Sweden, England and Germany.
- * Ran a port scan against internal, external and DMZ interfaces on firewall. Port scanned DNS machines, external mail server and all machines on the DMZ to test for unnecessary open ports. Tools used: Nmap, Nessus, Saint.
- * Ran Vulnerability Assessment Scans against firewall using ISS Internet Security Scanner. Simulated different attack scenarios that could be launched against this firewall and tested for vulnerability.
- * Review current implementation of virus control and reviewed current password policy. Recommended changes in setup of McAfee virus scanner and recommended a stricter Password policy.
- * Configured Border Manager Firewall on Novell 5x server and evaluated Border Manager for

outbound web security and control. Setup firewall rules and Cyber Patrol on Border Manager.

- * Evaluate Internet Access Control products to determine best value and functionality. Installed and configured Languard Firewall for outbound web control. Installed and configured Mail Essentials Mail Server for outbound and inbound mail control and virus scanning of attachments.
- * Evaluate various Intrusion Detection Systems to determine best functionality for the network environment. Did comparative analysis of Cisco NetRanger to ISS RealSecure.
- * Installed and configured ISS RealSecure on Windows NT and setup in the DMZ.
- * Put on demonstration for upper management of LanGuard, Mail Essentials, RealSecure Intrusion Detection System and Border Manager Firewall.

United States Department of Commerce, Census Bureau – Phoenix, Arizona

Contract: December 99 to March 2000

System Administration / NT Cluster Workflow Engineer

- * Member of System Admin team responsible for 400 NT Servers & 2,000 NT Workstations
- * Use Tivoli & HP OpenView to monitor Phoenix Census 2000 Data Capture Center Network
- * Use Staffware, Formware and Oracle Discoverer Tool for DCS 2000 System data administration. Responsible for assuring the correctness, completeness, and accuracy of data captured from census returns by monitoring database integrity, system accuracy and performance by generating queries, reviewing reports and analyzing data.
- * Monitor overall data capture process to identify anomalies and recycle corrupted batches.
- * Provide technical assistance maintaining Kodak high speed document image scanners.
- * Monitor and evaluate Optical Character Recognition Subsystem and automated QA processes.
- * Monitor status of form checkout database using Oracle SQL Plus Ver 8.
- * Manage Sun computers running Unix (Solaris) for Legato Backup System.
- * Manage 23 Terabyte Dell Raid Farm.

AT&T – Phoenix, Arizona

Contracted from Technisource to Global Consultants to AT&T

Contract – May 98 to Contract Completion: May 99

Senior Network Engineer

- * Responsible for all PC network support at Operator Services Building.
- * Support NT Workstations in a TCP/IP network environment
- * Document LAN environment for site profile.
- * Provide first level support for Unix network.

Arizona Attorney General's Office / Arizona Department of Transportation

Contracted to Attorney General's Office – Work Site at D.O.T.

Oct 1997 to Contract Completion: April 1998

Expert Witness

- * Replicate & document the Enterprise Project computer environment and other tasks required or directed by the State Attorney General's Office; including testifying in court.
- * Build Isolated Token-Ring network, connect 21 PCs and backup to tape on server.
- * Install new SCSI drives in Raid array on Compaq Proliant server
- * Install OS/2 Server and restore MS Mail Postoffice to server
- * Sort, recover and backup email as requested by Attorney General's Staff.

Ameritech - Chicago, Illinois

June & July 1998

(Contracted from Taylor Management to Ameritech - 2 month contract)

NT Workstation/Network Support – Novell & NT Network

- * Provide assistance to endusers with Windows NT 4.0 Workstation and software
- * Correct network connectivity and network printing problems
- * Setup 3270 emulation software and correct related problems
- * Install/Repair NT 4.0 installations

Bank One - Bank One Tower, 201 N. Central Phoenix, Arizona
(Contracted from Blackstone Group to Microage ASC to Bank One)
September 1996 to May 1997

Project Engineer – Novell LAN/WAN

- * Part of project team implementing Novell WAN solution with TCP/IP
- * Teach TCP/IP troubleshooting & remote management support classes.
- * Maintenance, setup and repair of Cubix boxes.
- * Code install program for TCP/IP/Reachout Viewer Kit
- * Oversight and remote management of 52 Novell servers and four Cubix cabinets.
- * Testing & Setup of Windows 95 on Cubix processors.
- * Provide phone technical support to computer personnel involved in implementation.

Cigna Healthcare - Phoenix, Arizona

Contract: March 1995 to Contract Completion: Dec 1995

Lan Engineer

- * Oversee Novell, Windows NT & OS/2 Networks
- * Responsible for OS/2 workstations on Novell Networks
- * Implement Windows NT Servers into Lan Server Network
- * Special Projects involving NT, SMS Remote Support of Win 95 over TCP/IP on RAS
- * Setup 3270 Emulation with Attachmate on Windows 95 Workstations
- * Resolve PC to Mainframe connectivity issues.
- * Install SQL Server and SMS on Windows NT.
- * Setup and Perform SMS demo for upper management.

Finova - Phoenix, Arizona

Contract: December 1995 to March 1995 (Tad Technical to F.B.&B. Consulting)

Systems Engineer (Contract Position)

- * California Project – Conversion from Banyan Vines to NT Server & WFW
- * Dial Tower, Phoenix – Conversion from Banyan Vines to NT Server & WFW

Precision Data Group - Phoenix, Arizona

July 1993 to Nov. 1994 (Reference Contact:: Mike Bartlett - 602-298-8486)

Manager/Field Engineer - PC Network Sales & Support

- * Performed installation and on site support of Novell & LANtastic Networks.
- * PC configuration, sales & repair.
- * Consulting & Software training
- * Wide Area Network Installation & Support
- * Setup remote communications, fax servers, comm servers, etc.
- * Manage office, organize and implement marketing strategies

Arizona Computerfacts - Glendale, Arizona

March 1992 to March 1993

Field Engineer

- * Installed and maintained Novell and LANtastic computer networks
- * Built, upgraded and repaired IBM-PC compatibles
- * Provided Telephone and on-site support for DOS, Windows, Lotus, Dbase IV, WordPerfect, Lytec Medical, and many others.

Mark's Computer Service - Wickenburg, Arizona.

1988 TO 1991 (Reference Contact: Self Employed)

Owner/Operator Computer Sales, Service and Consulting Business

- * Sales and on-site service of IBM-PC compatibles.
- * Gave computer instruction in DOS, Windows and various software packages such as WordPerfect, Dbase IV and Lotus.

Wickenburg Assembly of God, Inc. - Wickenburg, Arizona

1986-1991 (Reference Contact: Self Employed)

Pastor and Chief Executive Officer of Corporation

- * In charge of all administrative responsibilities of the church.
- * Gained experience in public speaking, teaching, group dynamics and motivating cooperative team efforts toward planned objectives.
- * Bookkeeper for church accounts.

Arizona Automotive Institute - Glendale, Arizona

1985 - 1986 (Reference Contact: Tom Gahl)

Instructor - Computerized Engine Systems, Driveability, Electrical Systems, Carburetion, Electronic Fuel Injection, Electronic Ignition, Emission Controls and Tune-up.

- * Lectured four hours per day in classroom & Instructed four hours per day in shop
- * Wrote new training material for computer scope diagnoses