

# Thomas F. Welch

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## Summary of Qualifications



2007 - 2010

JTL Networks Inc

Columbus, OH

### Linux Systems & Network Administrator

- Independently contracted by the company's CEO for the administration of over 1000 servers at JTL Networks Inc, web hosting facility located in Columbus OH. Responsibilities included establishing and maintaining physical networks, installation, configuration, and maintenance of RAID configurations, and hardware firewalls; troubleshooting, diagnosing, and replacing faulty hardware; installation and maintenance of APC and UPS systems; TCP/IP testing and troubleshooting; remote and local installation and configuration of various Linux distributions including Red Hat Enterprise 4 & 5, CentOS 3.4 - 5.4, Fedora Core 7 - 12, Debian 3.0 - 5.0, SUSE 9.3 - 11.2, Mandrake 8 & 9, Mandriva 2008 - 2010, FreeBSD 4.11 - 8, NetBSD 5 & 6, Courier and Exim mail servers; installation and configuration of Microsoft Applications: Microsoft Server versions 2000, 2003, and 2008, Microsoft SQL Server 2000, 2005, 2008, Microsoft IIS 6 & 7, Microsoft Exchange Servers 2000, 2003, and 2007; performing updates on all operating systems in data center, including security patches and RPMs; installation and configuration of custom backup solutions for Unix and Windows environments.

2001 - Current

Franklin County Sheriff's Office

Columbus, OH

### Systems Administrator

- Administration of several computer networks and applications in a widely variegated, regional wireless and wired environment. Responsibilities include development and project management of the Franklin County Justice Portal, a secure web based records management system; setup and administration of the Franklin County SO 911 Computer Aided Dispatch system; installation and support of mobile laptops and tablet PCs for the Patrol division and various other local law enforcement agencies within Franklin County; administration of numerous law enforcement Microsoft SQL Server applications, including but not limited to the FCSO Mug Shot System, Local and State integrated Criminal Offense Systems, Roster Systems, and 911.

2000

Abrasive Technology, Inc.

Lewis Center, OH

### Information Systems Specialist

- Network installations; Client network configurations; HD imaging; Hardware Upgrades; PC installations; Operating system and application installations and troubleshooting. Operating Systems included: Windows for Workgroups 3.1, Windows 95/98, Windows 2000 Professional, NT Workstation, NT Server and Windows 2000 Server. Applications included: AutoCad, SolidWorks, FastLook, SPEX 6, Visio, Office, Lotus Notes, PaintShop Pro, Novell Client, Cytrix, ReachOut, OCR, Oracle 8, Visual Manufacturing, Norton Ghost

1997-2000

Abrasive Technology, Inc.

Lewis Center, OH

### Chemist & Application Developer

- Created database applications for ATI. The most extensive of these was the ATI Tank Chemistry Laboratory Database, which utilizes macros, modular programming, and ODBC connectivity to Microsoft applications Excel & Access to perform various physical and chemical calculations, scheduling and fully automated Statistical Process Control Charts. This database was further enhanced and deployed to sister chemical electroplating plants in Illinois and England, and used for manufacturing processes and quality control therein.

1997 - 1998

Olsten Central Ohio LLC

Worthington, OH

### Computer Help Desk Operator

- Contracted by the *The Scotts Lawn Co@*. Information Systems Dept. to assist in the mentoring of Office applications such as Word, Excel, Access & Power Point to *Scotts@* associates. Assessed communication problems, and performed troubleshooting when phone lines and network lines were disrupted throughout branches in the United States.

1996 - 1997

Columbus S&D Division

Lockbourne, OH

### Laboratory Technician

- Developed and implemented an in-depth Access database system for the Columbus Compost Facility laboratory. Created MS Query linked charts and pivot tables in Excel for the charting of inventory and processed material.

<b>Education</b>	1987 - 1997	<i>The Ohio State University</i>	Columbus, OH
	<b>BA in Russian Language, w/ Minor &amp; Senior Status in Microbiology</b>		
	2000	<i>J.D. Hersey &amp; Associates</i>	Dublin, OH
	<b>Microsoft Certified Systems Engineering Course</b>		
	2001	<i>Babbage Simil &amp; Associates</i>	Dublin, OH
	<b>Microsoft Certified Professional (MCP)</b>		
	2004	<i>New Horizon</i>	Dublin, OH
<b>Completion of Interconnecting Cisco Network Device Course</b>			
2006	<i>National White Collar Crime 3WC</i>	West Virginia	
<b>BDRA (Basic Data Recovery Analysis) Certification</b>			
2007	<i>New Horizons</i>	Columbus, OH	
<b>SUSE Linux – 30 Hours</b>			
2010	<i>New Horizons</i>	Dublin, OH	
<b>Securing Networks with Cisco ASA Foundation   Cisco SNAA – Securing Networks with ASA Advanced</b>			

**Languages**

**Russian:** Speak, read and write fluently. Advanced language skills developed during 1990-1994 when employed by Battelle Memorial in Columbus, OH. Job responsibilities included scanning classified and unclassified military and scientific literature and technical manuals for technical information that was entered into a database managed by the U.S. Defense Intelligence Agency (USDIA | <http://www.dia.mil>). Coworkers in this environment were of native Russian, Ukranian and East European descent and primarily spoke Russian in the workplace.

Additionally, in 1993, I was a translator for William McGrath, Anabaptist Mennonite Ministries, Christian Fellowship of Minerva Ohio, and travelled to Kiev, Ukraine. My duties included translating Russian/English for a group of over 35 American Mennonites, and remaining for tenure of 25 days, thereafter, in Kiev, in order to establish a land contract for the building of a printing house for McGrath Publishing. My responsibilities included meeting with the Deputy Interior Ministry of Ukraine, Center of City Planning and Architecture and German Printing Press manufacturers in Kiev, Ukraine for the successful implementation of this effort.

**References**

Shanon Crowther	Director of Information Technology	(614) 462-3014
Dominick Rocchi	Development Engineer	(740) 476-9661
Jon Heidenreich	Network Administrator	(740) 964-0402
John Hoff	Plant Manager	(614) 645-3153

**Objective**

To contribute my security, administrative and management skills to an *Information Technology* based firm committed to professional software and hardware solutions or network services.

## **Additional Accomplishments**

From 2006-2011, I participated in the orchestration and architecture of an automated license plate reader (LPR) scanning system in use by Columbus Police Department, Franklin County Sheriff's Office and several local Police Departments and Sheriff Office's throughout the state of Ohio. A wide variety of VPN technologies were incorporated for this solution, including the usage of Cisco ASA devices, Net Motion, CheckPoint Secure Remote and OpenVPN. These cameras perform sophisticated OCR recognition and are securely connected to law enforcement databases, in order to enforce the apprehension and arrest of felons with outstanding warrants.

2009, Received Buckeye Sheriff's Association Award for the architecture, implementation and support of a multi agency secure network for the online investigations of internet crimes against children (ICAC). This network continues to grow throughout Ohio.

In 2008 the National Association of Justice Information Systems (NAJIS) inducted me to become a part of the nonprofit organization's Board of Directors. I have given presentations at several conferences and am centrally engaged in website development and hosting for the organization. For more information, visit [www.najis.org](http://www.najis.org)

In 2006 Received an *Appreciation Award* from Franklin County Sheriff, James Karnes, for contribution of expertise and time in aiding the FBI and the FCSO Investigation Bureau during the **2004, Columbus I-270 Shooter Investigation** that led to the arrest of Charles McCoy.

Owner of Limited Liability Corporation, **TWelch Enterprises, LLC**.

**Premium Subscriber to MSDN** (Microsoft Developers Network) *Microsoft (Member ID: 13942479)*

Configuration and Installation of Cisco network gear, including Routers and Switches. Configuration experience includes setup of Access Control Lists (ACL), Network Address Translation (NAT), and VLANS.

**Appeared in a featured article in Field Technology magazine** with Chief Deputy Stephen Martin, regarding Franklin County Sheriff's Office being an avant-garde law enforcement agency, leading the implementation of wireless handheld (RIM Blackberry) technology to access National Crime Information Center data in the field.

**Appeared in a featured article in Government Technology webinar and EMA magazine** that discussed Franklin County Sheriff's Office deployment of PocketCop, an application that allows FBI Special Agents and local law enforcement officers and deputies to access BMV photos, LEADS and NCIC information on RIM Blackberry Smart Phones.

**Featured in a RIM Blackberry Internet Case Study** that discussed Franklin County Sheriff's Office deployment of the PocketCop application, formerly mentioned.

**Featured in a Sprint/Nextel Blackberry Web Case Study** that discussed Franklin County Sheriff's Office deployment of the PocketCop application, as previously mentioned.

## **Hobbies**

Building & repair of computer hardware; programming; guitar; piano; music composition ; canoeing; camping and fishing

## **SUMMARY OF COMPUTER & NETWORKING EXPERIENCE, KNOWLEDGE AND SKILLS**

### **NETWORK HARDWARE**

#### INSTALLATION OF:

CISCO SWITCHES & ROUTERS: CONFIGURATION AND SECURITY THEREOF (2700 series, 1600/1700 series)  
CISCO SECURITY APPLIANCES: ASA 5510, PIX 500 SERIES  
HUB SWITCHGEAR  
PATCH PANELS  
CABLING

RJ-45 CABLE  
COAX CABLE: THINNET  
NETWORK INTERFACE CARDS

### **BACKUP RESTORATION OPERATIONS**

#### INSTALLATION AND CONFIGURATION OF:

DDS3, DDS4, LTO, SDLT TAPE DRIVES  
BACKUP TAPE DRIVE LIBRARIES – DELL POWERSHIELD

#### BACKUP SOFTWARE

VERITAS BACKUP EXEC, VERSIONS 8.5, 9.0, 9.1, 10, 11 & 12  
SYMANTEC GHOST 2003, and v 9.0

### **PC COMPUTER UPGRADES & DIAGNOSTICS**

#### MOTHER BOARDS

#### RAM

#### VIDEO CARDS

#### SOUND CARDS

#### CD ROM DRIVES

#### FLOPPY DRIVES

#### NETWORK AREA STORAGE DEVICES

#### HARDDRIVE DIAGNOSTICS AND UPGRADES

#### HARDDRIVE IMAGING:

VARIOUS DRIVE MANUFACTURER UTILITIES

NORTON® GHOST UTILITY

NETWORK GHOST® GHOST MULTICAST

CUSTOM LCD AND VIDEO SOLUTIONS – INCLUDING WALL MOUNT LCD INSTANTATIONS

### **SERVER INSTALLATION AND SUPPORT**

#### RACK MOUNT BLADE SERVERS

#### HP/COMPAQ ML SERIES SERVERS

#### DELL POWEREDGE 6400, 6600 SERIES SERVERS IN MIRROR AND CLUSTERED ENVIRONMENTS

#### LEGATO MIRRORING OF 911 SERVERS

### **PROTOCOLS**

TCP/IP: TESTING, TROUBLESHOOTING

IPX/SPX: TESTING, TROUBLESHOOTING

### **CLIENT/SERVER SOFTWARE**

NOVELL® CLIENT v.2.71 FOR DOS, v.3.3 FOR WIN 95/98, v.4.8 FOR WIN NT4/WIN 2000

WINDOWS 2000/2003 SERVER WINDOWS NT 4, WINDOWS 2000, XP HOME/PRO, WINDOWS 98

ENTERPRISE DOMAIN ENVIRONMENTS

### **SPREADSHEET SOLUTIONS**

MICROSOFT EXCEL (EXCEL 97, EXCEL 2000, 2003, 2007, 2010)

PIVOT TABLES

MACRO DESIGN

ODBC CONNECTIVITY

VISUAL BASIC FOR APPLICATIONS (VBA)

STATISTICAL PROCESS CONTROL CHARTS

**SUMMARY OF COMPUTER & NETWORKING EXPERIENCE, KNOWLEDGE AND SKILLS (CONTINUED)**

**RELATIONAL DATABASE ADMINISTRATION**

MICROSOFT SQL SERVER 2000/2005/2008  
VIEWS AND PROCEDURES  
DATA TRANSFORMATION SERVICES  
SCHEDULED DATABASE AND TRANSACTION LOG BACKUPS  
MICROSOFT BIZTALK SERVER 2000/2005  
MICROSOFT ACCESS (ACCESS 2.0, ACCESS 97, ACCESS 2000, ACCESS 2003)  
TABLE AND FORM DESIGN  
QUERY DESIGN: SQL, CROSS-TAB, UNION QUERIES INCLUDED  
MACRO DESIGN  
MODULE CODE PROGRAMMING  
REPORT DESIGN  
DATABASE COMPACTION  
DATABASE PASSWORD ENCRYPTION  
DATABASE SECURITY  
DATABASE BACK UP AND RESTORATION  
CLARION ENTERPRISE V. 6.5  
CLARION TOPSPEED DEVELOPMENT AND DATA CONVERSION  
CLARION ODBC INTEGRATION FOR MICROSOFT APPLICATIONS, INCLUDING SQL SERVER & MSACCESS  
CRYSTAL REPORTS (V. 9.0, 10.0 AND 11.0)  
MYSQL  
NAVICAT

**VISUAL BASIC (v. 5.0 & 6.0, 2003, 2005)**

APPLICATION FORM DESIGN AND IMPLEMENTATION WITH MICROSOFT ACCESS

**COMPUTER FORENSICS:**

RECOVERY OF DELETED DATA FROM REFORMATTED HARD DRIVES

**ADDITIONAL PROGRAMMING LANGUAGES**

BASIC  
PASCAL  
ACCESS BASIC, VISUAL BASIC, QBASIC  
ASSEMBLER: FOR THE MOTOROLA® 6800 PROCESSOR  
CISCO ROUTER COMMANDSET

**WEB DEVELOPMENT**

HTML 4/5, PHP, JAVASCRIPT, WORDPRESS, JOOMLA, ASP.NET, APACHE PROJECT, IIS

**WIRELESS NETWORK SOLUTIONS**

KNOWLEDGE AND CONFIGURATION OF WIRELESS MODEMS AND DEVICES UTILIZING A VARIETY OF WAN TECHNOLOGIES WITH MAJOR CELL CARRIERS INCLUDING:

MOBITEX FRAME RELAY  
CELLULAR DIGITAL PACKET DATA NETWORK (CINGULAR/AT&T)  
GPRS/EDGE (CINGULAR/AT&T)  
CDMA/EVDO/REVA (SPRINT/NEXTEL; VERIZON)  
802.11 b/g/n