

Enterprise System Architect

Twenty four years of experience in a diverse range of technologies, industry environments, and Disciplines Solid management success in the areas of Networking, Software Engineering, System and Software security, Database Design, Security Compliance, and Product Development. Proven track record of delivering results that focuses not just on implementation, but mentoring and teaching Implementation standards, procedures, and processes that cost effectively enhance business functionality.

TECHNOLOGY 24 Years Industry Experience

PROFESSIONAL EXPERIENCE

SunCountry Airlines - Enterprise System Architect - 9/2013 – 11/2014

PCI Compliance Project – Malcolm’s responsibilities and contributions focused on addressing PCI preparedness and compliance in the areas of software development, databases, and infrastructure systems (Active Directory, Security, and so forth). Malcolm would analyze the PCI DSS requirements, and map those to specific action items and changes necessary in some parts of infrastructure (vmware, checkpoint firewall policies, vpn, active directory, certificate services, windows 2012 server), logging across servers, cisco devices, storage, esx servers, databases.

1. Malcolm implemented 2 factor vpn using Checkpoint firewall and Secureauth and Microsoft Certificate Authority.
2. Implemented system changes on the F5 load balancer and checkpoint firewall to ensure PCI compliance
3. Implemented SQL Server changes and configuration changes for compliance
4. Worked with development team on system and software changes for compliance. Recommended appropriate architectural changes in web services and development stack to facilitate pci compliance and enhanced security while maintaining functionality
5. Taught/mentored/delegated tasks to other team members where necessary

SQL Architect – Malcolm’s responsibilities included taking over the DBA and architect role for all SQL servers. Malcolm worked with the development team and data services team to architect more efficient ways to design the data flows and data reporting for business intelligence. Malcolm helped/taught/mentored other team members with the correct usage and implementation for stored procedures, guidance for how to design faster queries, performance tuning, how to create and leverage concepts like table based functions in overall design, setup of sql replication with internal systems and external vendors – again taking the knowledge and experience of many different technology disciplines and leveraging them for complete solutions.

Software Development – development of webservices used to implement system solutions. For example, Malcolm would create c# web services where necessary as proxy authenticators or proxy data retrieval layers across PCI secure zones. Malcolm’s role was not just simple implementor, but to actually solve the overall problem by engineering solutions that used multiple disciplines – security, c# programming, sql server programming all to resolve a business need: getting sensitive data to external, none networked users or allowing external users to authenticate to previously developed systems without sacrificing pci compliance.

Exchange 2013 Implementation and Upgrade – Malcolm was responsible for taking over the Exchange environment after a hard crash, rebuilding the old 2007 environment from scratch, bringing all customer and vendor communication and

business systems back online. Then, Malcolm designed, and architected a fully resilient Exchange 2013 system. The system was hardware redundant with multiple DAG instances and site redundant with dag copies across physical sites as well as a CAS farm across physical sites. Malcolm setup all of the infrastructure from the exchange roles to the firewall rules on the checkpoint to the f5 configurations for load balancing. Malcolm migrated users, mailboxes, public folders, and all functionality from 2007 to 2013. Malcolm migrated office 365 users from the cloud to on premise. Malcolm created the appropriate security for pci compliance as well as more redundant and secure smtp traffic. Malcolm made sure all connectors were well scoped.

Lync 2013 Implementation – Malcolm was responsible for architecting a full Lync Implementation that included:

1. Lync Enterprise front end pool for Internal chat, audio, and video conferencing – Malcolm also completed all firewall and f5 configuration and design.
2. Lync Media pool for integration with Cisco Call Manager for Lync to phone calling, phone to Lync dialing, and Lync conference bridging. Worked with Cisco Voice CCIE partner to collaborate and make sure voice calls, dialing plans, voice quality on both the Lync and Cisco side were engineered and tested correctly.
3. Lync Edge Pool for external presence, chat, audio and video conferencing internally and externally with the full Lync client or web client.
4. Successful rollout and training for the IT and user community

Southwest Airlines – Enterprise System Architect – 9/2011 – Present

Malcolm's role at SWA is tightly integrated with Airtran. This is because SWA purchased Airtran in 2011. As the original Enterprise System Architect at Airtran in 2010, Malcolm served to help architect solutions towards the merger, post merger, through Last Metal Fly operations and systems. Malcolm's role covered working in several departments using many technology disciplines. The common theme being to function as the architect and use knowledge and experience across disparate disciplines to engineer solutions or solve business problems.

- PCI Compliance – Yearly, Malcolm was part of PCI compliance teams and forging changes necessary for compliance in the SQL server space, .net programming and web services, windows server systems, vmware systems, Cisco and Juniper firewall systems. In the most recent year, Malcolm was responsible for bringing SWA compliant on all Airtran related network access internally across SWA to Airtran network boundaries and externally across Airtran to vendor/ACARS/Airport station boundaries. Malcolm did this by reverse engineering traffic patterns, creating sql server code to import cisco traffic logs, creating code to analyze the logs and create traffic models, and then switching to the networking side and making appropriate changes in production to the Cisco ASA firewalls. Malcolm made all necessary changes and brought full compliance with NO mistakes, no downtime, and no disruption. The auditor commented that he had never seen an implementation as methodical and comprehensive as Malcolm's for network security pci compliance.
- Software Development – Malcolm worked in the .net software development team. This involved .net programming and troubleshooting of new and legacy systems. But Malcolm's main contribution was bringing together the experience of the sql server disciplines, security, Active directory, windows server, storage systems together with the programming knowledge to troubleshoot problems and architect solutions.
- SQL Architect – because Malcolm was SQL architect for Airtran, Malcolm used the knowledge and experience to guide SQL dba teams and work closely with SWA dba teams on all sql server related issues from maintenance to ETL processes to performance tuning to new implementations
- Windows server engineering – Having been windows server architect at Airtran, Malcolm continued the architect role at SWA for Airtran systems. The integration and communication of the systems was the emphasis. Again, the focus was the mentoring and teaching of team members.

Airtran Airways – Enterprise System Architect – 7/2010 – 9/2011

Malcolm's role at Airtran was that of overall architect. Malcolm was given latitude to architect solutions across many business units inside and outside of IT. Malcolm worked with business leaders and director and VP/C level executives to interpret the business problems and architect technology solutions – sometimes ground up.

- Malcolm was initially brought forth to design and implement the upgrade of Exchange server from 2003 to 2010. Malcolm architected a fully resilient, site redundant DAG based design. Malcolm created f5 load balanced farms for the CAS role, Hubtransport role, and edge server role. Malcolm created multiple DAG instances for database resilience. Malcolm implemented the design, migrated the users and mail dependent systems, and retired legacy systems.
- Lync Implementation – Malcolm worked on the Lync implementation and upgrade for chat and audio video. However, SWA purchased Airtran before the full rollout could be completed.
- SQL Architect – Malcolm took over all sql Server dba, programming, and data modeling roles and responsibilities for Airtran. This meant implementation of mirroring or replication where needed, troubleshooting and design of new database systems for custom code or off the shelf applications, policies and procedures for database maintenance and security, performance tuning , and migration and consolidation of databases and instances from legacy sources to Malcolm created, giant sql clusters.
- Windows Server Engineering – Malcolm role in this area was creating processes and solutions for better maintenance of existing windows server systems Active Directory upgrades and troubleshooting along with group policy design, storage systems with netapp, firewall systems with Cisco asa , and overall oversight of windows server landscape. This included numerous projects and implementations from Sharepoint to TMG to Ironport to WebSense to a host of supporting technologies.
- Application system integration – Malcolm implemented many off the shelf applications and used the overall technology stack knowledge to successfully integrate them. This would be AsecureID badging systems, ADP systems, AQD systems for inflight incident reporting

Investigo/Broadview Financial – Software Architect – 3/2010 – 10/2010

Malcolm role at Investigo was focused on implementation of a secure WCF solution to allow customers to consume stock and investment data through WCF web service calls from the Investigo server. Malcolm used message and transport layer security and encryption to ensure the message data was encrypted in a separate key and package from the transport layer. Malcolm also used two way certificate authentication. Although the original requirements called for a hardcoded, one schema solution, Malcolm turned that approach on its head and created a dynamic, database driven solution instead. This allowed an administrator to randomly create a new construct for a new stock management broker client and determine what kind of data they would be allowed to consume and charge them accordingly. The original legacy system was hardcoded per client. Malcolm went against the requirements and created a single, dynamic application that could grow as the client's needs changed without any code changes.

Malcolm also worked extensively on the sql server programming of complex stored procedures, queries, and c# code to calculate stock and money market related values such as market value, historical value, and the capital gain as well as many other datapoints based on higher order math. Malcolm took reports in sql reporting services and c# and stored procedures that together would take 20 minutes or more to calculate for large accounts over 2 years and completely re-engineered and re-architected them to 12 seconds average.

Silver Airlines – Enterprise System Architect – 12/2012 – 8/2014 (not contiguous)

Malcolm's role as an architect at Silver ranged across several non-contiguous projects. In each case, Malcolm was called upon when problems involving multiple technology disciplines needed assistance:

1. Worked on troubleshooting and problem resolution for message transmission between Silver and United using United Airlines messaging system. This involved analyzing the c# code, the messaging infrastructure, and the security infrastructure.
2. Worked on c# system to allow single sign on and transfer of data between MyIdTravel and Silver's internal adp database. This involved analysis of existing C# code, re-architecting of some c# code, implementation of web services, WCF transport layer security with two way certificate authentication, ADFS (active directory federation services) – which Malcolm designed and implemented, SQL server programming, and firewall analysis and policy changes. The project required knowledge and experience of both c# programming and WCF, certificate authentication and CA server setup and templates, ADFS full setup and implementation. Malcolm covered all of them.
3. Other adhoc architect requirements as needed

AAR Airlift Group - Enterprise System Architect – 12/2012 – Present (not contiguous)

Malcolm's role as an architect at Silver ranged across several non-contiguous projects. In each case, Malcolm was called upon when problems involving multiple technology disciplines needed assistance:

- Worked on Real Time Business Intelligence reporting from various data sources using Dundas Reporting and SQL Server. Malcolm analyzed reporting requirements and existing, legacy data systems through Excel and legacy aircraft maintenance systems, reverse engineered old systems and created new data warehouse in SQL server using mirroring and replication where needed. Designed complex stored procedures and table based functions that generated the correct data in fraction of original timeframes.
- Worked on multiple infrastructure projects in an architect designer role (not implementation).
- Worked on assistance with Sharepoint 2010 troubleshooting and redesign

Littelfuse

Technical Lead & System Architect/ CITRIX DEA & CITRIX Administrator for

Challenge: Lightning struck the corporate headquarters facility where all of the company servers were located. This caused all of the servers to go down simultaneously. Their FAP production, applications, and users were all down worldwide.

Solution: Created a three phase technical plan that including testing procedures and production/go live implementation, creating backup server instances where the server was being migrated to the new data center, setting up Double-Take for each of the critical systems on the application or server, creating duplicate server systems on the backup data center site, performing disaster recovery drills, creating redundancy and resiliency within the critical systems so that email had multiple SMTP entry points, multiple gateways, multiple layers of security on various layers on the network, performing a SharePoint implementation by architecting the SharePoint roll out to bring the company from an old global internet to a new SharePoint internet, and replicated redundancy with the Citrix 4.5 and Citrix XP. This first stage involved moving all critical applications (including servers and systems) to the primary data center site. The second phase of the application involved moving the tier two applications to the data centers. The third phase involved removing the remaining applications and creating a back up data center that would be a replica of the five critical production systems consisting of Exchange Server Clustering Services, SQL

Server Clustering, and several SAP databases were all replicated real time to the secondary data center from physical servers to virtual servers in a VMware Cluster.

Yamaha (24/7)

Technical Lead & System Architect

Challenge: Yamaha needed to provide an online presence that allowed resellers and independent borrowers to search and order parts from Yamaha assemblies and subassemblies online. The crux of this program was to allow integration with outside parties such as Tibco, Salesforce.com, and EDI.

Solution: I fully automated Yamaha's order processing system, which allowed customers to perform online product searches by customer or vendor part number, category, assemblies or subassemblies. The system Malcolm created was a multilayered web application that had many components using Vis Talk, Middleware, Work Flow Services, and IBM Tivoli for communicate between Oracle and the IBM mainframe. Created a program that allowed employees to map images of the products, such that if the customer did not know what he/she was looking for, that could've be presented with an image of the product that they select. The same part, when selected, have identified by a coordinate on the blue print of the product. This identification technology allowed the internal employee to map the product using a coordinate system so they could have a starting and ending coordinate, and a matrix that could be linked to the product and then mapped to Microsoft Commerce Server. Mentored and trained several developers, created an architect of system solutions, and a process for the project itself. The new website allowed customers to obtain detailed product information quickly. This reduced the number of wrong purchases, which ultimately reduced the number of product returns/exchanges. The detailed product information increased the customer knowledge and their ease of purchase.

Fellowes

System Architect

Challenge: The client needed a method to allow customers to come to their website, utilize the products and categories from their Oracle Database, and create a complex product hierarchy that allowed users to quickly and easily search the website for products, while creating custom product attributes that allowed Fellowes employees to add content and modify the hierarchy to dynamically reflect on the website without hiring dedicated staff to perform custom programming.

Solution: Created an appropriate hierarchy of all products that was displayed and eventually dynamically reflected on the website without the need for custom programming. Created a special feature that allowed discontinued products automatically linked to newer versions of the product. Created special sales applications that allowed sales personnel to produce sales presentations, make sales offers, and approve or disapprove sales products based upon existing criteria and having their results appear live instantly. Also created a backend system that allowed customers to communicate directly with fellow employees.

Illinois Department of Public Health

Technical Lead & System Architect

Challenge: The client needed a website to deliver potential health related or biological threat alerts to the public in an accelerated manner that would not require full time development staff to maintain, but could be updated by existing employees.

Solution: Created templates to produce surveys, disease control notices, and department sponsored event announcements. The complexities of programming and design were hidden from internal users. This allowed internal users to save content on the publishing page, have the content approved, and use workflow to publish the content. A prototype IDPH website, fully setup with MSCS was presented to state

decision makers prior to deployment. The website's ability to release information in a timely manner was advertised to the public as free dependable ways to access receive the up to date public health announcements.

Illinois Department of Commerce and Economic Development Database Program Administrator & Senior Application Programmer

- Challenge:** The client needed a website that allowed unregistered individuals and businesses to enter their zip code to receive custom content and direction based upon their profile and existing user's trend in a manner that would not require full time development staff to maintain, but could be updated by existing employees.
- Solution:** Created templates to produce surveys and department sponsored event announcements. Trained developers regarding complex MSCS and SQL Server features. Created programming to facilitate a state of artificial intelligence within the program to promote the end user's interests. These "tailored" results were successfully used to promote frequent use of the free public service.
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Chicago Park District

Project Manager

- Challenge:** The existing Enterprise system did not meet City of Chicago financial standards or Homeland Security requirements. The outdated state of the system was hindering employee productivity.
- Solution:** Update the financial and HR portions of the existing Enterprise System to AI. The organization was able to meet City of Chicago financial standards and Homeland Security requirements, while improving employee productivity which reduced costs. I served as the Project Manager for the upgrade of the CPD Oracle system. I also interviewed and chose the team members, created the project/implementation plan, managed the project resources/timelines, and performed Risk Management to ensure the project was completed.
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World Wide Fittings

System Architect

- Challenge:** The existing system did not allow customers to search for individual part(s) that belonged to specific assemblies or subassemblies by using their customer part number or several different vendor part numbers. The programming challenge was to accommodate the complexity of the site while maintaining the performance of the site, because each search results for each part needed to display a diagram of the related part.
- Solution:** Created a website that allowed customers to search for parts associated with specific assemblies and subassemblies, while allowing search results including a diagram and detailed part information to be returned quickly. Created a fully functional prototype prior to deployment. By this the new website allowed customers to obtain detailed product information swiftly. This aided in reduction of wrong purchases, which ultimately reduced the number of product returns/exchanges. The detailed product information increased customer knowledge and frequency of their purchase(s).
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Lionstone

Senior Networking Specialist

- Challenge:** The client did not have an internal IT department to address their system concerns.
- Solution:** Provide IT contractor services necessary to update, respond to concerns, and secure their system(s). The client was able to maintain and upgrade their system without retaining a full time development staff, their IT costs were lowered due to the proactive maintenance and upgrades made to their system(s).
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Midwesco

Senior Networking Specialist

Challenge: The client did not have an internal IT department to address their system concerns.

Solution: Provided IT contractor services necessary to update and secure their systems and respond to various system vulnerabilities.

Benefit: Provided IT contractor services necessary to update and secure their systems, while responding to various system vulnerabilities. This also experienced a reduction in IT costs due to the proactive maintenance and upgrades made to the systems.

DSM Desotech

IT Director & System Architect

Problem: The previous IT vendor had escalated costs and failed to take proactive measures to address system vulnerabilities.

Solution: Provided proactive versus reactive IT services that addressed system vulnerabilities. Created a team of desktop engineers, network engineers, and Cisco engineers to replace the DSM outsourced IT vendor. Analyzed the US network and WAN at every level, including voice systems and voice over IP systems via Avaya. Employed VoIP services using the company's existing T lines to significantly reduce the company's telecom expenses for intercompany calls.

RadioShack (Satellite Stars, Monopoly 12, Monopoly 3)

System Architect

Challenge: RadioShack employees needed a secure sophisticated online incentive program to increase sales for products in the Satellite DirecTV Dish Network, cell phone, and cell phone accessory division, without requiring employees to manually input the related sales information.

Solution: Created a web application to house confidential information for all RadioShack employees in the continental US & Hawaii, organized by social security number. Created complex business rules and mathematical formulas to determine the criteria necessary for employees to earn sales incentives based upon RadioShack's return/sales policies and procedures. Imported daily sales for all employees and stores to reveal which employee(s) qualified for designated incentives. Created encrypted reports that allowed RadioShack executives to view available sales incentives for top sellers using line graphs and pie graphs as well as export report data. Allowed employees validate their sales, view their "points", process returns sales/refunds online to verify their qualified participation in Monopoly, Spin the Wheel, and Wheel of Fortune. Increased RadioShack sales and employee loyalty by creating employee incentive programs with a direct reward system.

Chicago Public Schools

Technical Lead & System Architect

Challenge: The existing IT staff was unable to address complex technical escalation, technical lead, or Cisco switches and firewalls issues.

Solution: Trained staff to address complex technical escalation, technical lead, or Cisco switches and firewalls issues in a timely manner by creating an escalation process. Also created technical processes and procedures at all levels to be implemented by desktop technicians, systems engineers, and networking engineers.

DSM Desotech

System Architect & Lead Desktop Engineer

Challenge: The client needed a way to integrate their new manufacturing facility (containing 4500-5000 employees) into the national and global DSM network by a specific deadline.

Solution: Create a detailed project plan that covered all aspects of the implementation, from desktop installation wiring, to the phone system installation, server installations, data center creation, and Windows-based network integration of the sites active directory network into the global active directory. Also reduced company costs by integrating the voicemail system into the national VoIP system and created a template for the desktops and servers. Made the facility fully operational by the agreed deadline.

Chicago Metropolitan Chamber of Commerce
System Architect

Implemented the configuration of organizational software that allowed a non-profit business representing over 1.3 million employees to manage internal documents, news, and events. Supervised the server setup, hosting, and content manager configuration.

EBind Insurance Services
CTO

Responsible for both the networking and website development, hosting, email server, SQL server, and technical leadership. I had to setup the entire site infrastructure including servers, security, firewalls, SQL server, and etc., also by coordinated tasks for the developers. I performed hands on programming and database programming and design as well as overseeing and tutoring the junior developers on programming concepts and strategies. I have also functioned in the role of project manager for the website development. The website is an online insurance B2B eCommerce system. The agents are able to purchase workman's compensation and business owner policy insurance online, get multiple quotes from multiple vendors, and bind online in real-time. Malcolm was also responsible for leading the initiative with contract negotiations for vendors and assists the CEO with support for business plan and presentation to insurance carriers. Skills used were ASP, Visual basic, SQL Server 2000 and 7.0, JavaScript, Java, VBScript, COM, DCOM, ADO, and so on.

AnimalEvents.com
CTO

Responsible for both the networking and website development, hosting, email server, sql server, and technical leadership. Managed the project from a technical perspective, Set up the entire site infrastructure including servers, security, firewalls, sql server, along with coordination tasks for developers. Performed hands on programming and database programming and design as well as overseeing and tutoring the junior developers on programming concepts and strategies. This website is a B2B and B2C site with a much broader audience. Responsible for the developers to drive the technical team, instigate correct design and development process procedures, and do the actual programming and database programming and administration. Skills used were ASP, Visual basic, SQL Server 2000 and 7.0, JavaScript, Java, Exchange Server, VBScript, COM, DCOM, ADO.

CDUniverse.com
CTO/System Architect

As an CTO, my responsibility were for both the network and programming departments, by developing teams to design key aspects of the ASP website, completing new programming projects for marketing, customer service, and the e-commerce site. Taking charge of the networking team on site migrations, network topology, backup implementations, SQL replication, network administration for the internal corporate network and the e-commerce network. Implement security for the network, the workstations, e-commerce databases, and the websites. Responsible for hiring and interviewing new employees for networking and programming, created programming and network changes to increase performance of page downloads from 1.5 minutes at worse to consistently less than 3 seconds. Implement load balancing among the web servers. Mentored and trained the developers on proper methodologies

Unext
System Architect

Worked on the Oracle data modeling and SQL programming for the online training websites. This integrated lotus domino chat and broad vision web data into centralized database for online analytical processing. Created layered OLAP SQL queries for the Oracle, and analyzed on a unified source safe implementation.

Anexsys

System Architect

Worked on the IRS Electronic Funds Transfer System programming using vb6 to bring a consumer tax software from two tiered to multi tiered. Changed the communication layer and improved performance as well as numerous VB programming changes. Made the conversion from DAO to ADO as well, Due to the obvious high visibility, the customer needed a VB expert with focus on proper coding, maintainability, and quality assurance.

Ask Ark International

Lead Developer

Set up and configured the web server environment from ground up – including security and firewall issues - and was responsible for all system infrastructure issues including IIS, security, firewall configuration for the website, exchange Server, SQL Server. Set up and maintained all Microsoft back office products. Programming responsibilities were to create an artificial intelligence website using Java, some client script as well as server script. Programmed in Perl as well. Also programmed in Flash's Action Script handling the programming functions of flash. After the website was successfully completed, created a Japanese site and addressed the multi-lingual issues of the site from the programming and system perspective. Skills used were ASP, Visual basic, Exchange Server, SQL Server 7.0, JavaScript, Java, VBScript, COM, DCOM, ADO, and so on.

Teachers Academy of Math & Science (TAMS) – Database System

System Architect

Designed and created vb6 web application. User layer in ASP, business layer in active x components on NT server, data layer also in active x components to sql server 7.0 backend. Project included full programming from concept to up and running web site including NT Server configuration, TCP/IP configuration, DNS, IIS configuration, MTS integration and programming in the VB6 components, error handling for special needs of web application, creation of hundreds of stored procedures for business logic and data application. Key focus was programming and design for performance. Budget constraints yielded a low scale NT server. Web app designed to use small memory footprint and return result to user as quickly as possible. Requirement dictated running on both MACs and PCs. User could create their own data forms and reports on the fly as well as links and menus within the application. Crystal 7 web server and capabilities used. Continues to support existing app and move into phase two for additional enhancements.

AON Insurance - CCTS

Lead Developer

Aided on existing insurance software. Took existing 2-tier model and converted code to full three-tier model. MTS implemented at the server and coding level (VB coding MTS compliant where applicable). Backend SQL Server 6.5 migrated to 7.0. Project involved design, programming, SQL Server database administration, sql server programming on front end and back end via stored procedures and business data logic. Project also involved understanding of Insurance industry issues.

OneOnOne Training - OOO Courseware
System Architect

Replaced the remainder 'off the shelf' multimedia training software for the MSOffice suite and modified both the software and install program to create new Networking version, this version uses network aware concepts and user-friendly network setup to facilitate complex behind the scenes integration. Project included creating licensing OLE component that uses calculus-based algorithm for verification. Key part of project was to make application more stable and prevent system crashes via proper error handling.

PepsiCo Quaker - Cooler Pro
System Architect

Designed and developed for customer market analysis tool used to analyze the customer's sales data and compare it with the markets syndicated data (from Nielsen). Marketing and mathematical concepts were the key focus for complex sql for reporting and analysis. Wizard style application walks the customer through a complete market analysis with full reporting and graphing at the completion of the input. This product is currently used nationally by the Quaker sales force for convenience stores and presented at the 1998 National Association of Convenience Stores technical convention. The technologies used were sql, visual basic, ole automation, crystal reports, relational database design, and custom graphing. Recalled to continue and add features and enhancements to initially delivered system for past three years.

Wagner Signs – Exchanger Server/Fax System
System Architect

Designed and developed custom fax and internet MAPI server. The application used active X to access the SQL Server 6.5, and depending on a set of criteria, automatically fax, email, or internet email clients in the database in real-time. The project involved Exchange server administration and engineering, SQL Server programming using stored procedures and database analysis, and Visual Basic 5.0 programming. Separate project for same company involved advanced Exchange server 5.0 engineering including connectors, X 400 Gateways, MTA Transport stacks, Fax Gateways, and MS Mail Gateways. Some NT Server and SQL Server administration involved as well.

Bell & Howell Systems – BHS
System Architect

Worked with team to design and implement specialized mail sorting software. Involved in the visual basic and c++ programming, testing, documentation. Programming and debugging for the real-time embedded processor in (68000 processor). Created ole servers, numerous visual basic applications: Error Wizard – automatically implements advanced error handling into any visual basic project also uses ole automation. Helpdesk – allows tracking, maintenance of helpdesk calls, customers, problems, provides graphs, and reports, designed to easily expand with new dynamic reporting, uses network messaging to notify engineers of tasks and allow responses, uses ole automation with Word, and implements an answer wizard help find answers to customer problems. Some departments, including corporate headquarters, have abandoned their old software to use my new system. OLE Error Object – functions as out of process OLE server application to track application errors for reporting and debugging. OLE Network object – out of process server to allow communication between computers on a network using inter-process communication (mail slots, etc).

Chicago Leadership Council (CLC)

System Architect

Created Network based software package to allow the maintenance and tracking of HUD and marketing rate properties and prospective clients. Created search engine to find property matches for clients based on income, amenities, and other government stipulations. Internetworked final package in a NT Server based network over a WAN. All remote sites dial in to the server; download the database, the separate server application performs a series of SQL queries and database manipulation to create a final database containing the combined changes and updates of all sites. Remote sites upload the new updated database to view the work of all other remote sites. Continued to secure Software maintenance agreement and perform NT server administration and network administration for all sites. Provided training, documentation, and testing. Presently making software enhancements and operating under a network and software maintenance agreement.

Medical Facility - Patient Alert

System Architect

Created Unix Network based software system to allow communication between multiple workstations so that medical patient schedules, time slot availability, performance, and response reports generated. Continued to design, engineer, install, configure, and maintain UNIX network.

Federal Aviation Administration

System Architect

Worked with team on real-time embedded system project to control runway lighting for airport runways using object-oriented programming in C++. Implement Department of Defense documentation standards for the high level and detailed design.

Amoco Corporation – CIS Technology Licensing

System Architect

Designed and implemented an integrated database management, network messaging, and using C++, Visual Basic, extensive SQL, Access, Excel, and Word Basic. The CIS is an intellectual, chemical patent, and plant process for license agreements that have used for agreement management, payment and invoice tracking, and graphic reports (summaries, bar charts, projections, pie charts, etc.). Use Windows API calls and OLE Automation to access Objects (linked as well as embedded) from the CIS to Excel and word. Used dynamic Data Exchange to communicate with exposed Excel and Word Objects, documentation, and training provided.

Keebler Corporation – RTRAQ MIS Department

System Architect

Programming, modification, error correction, enhancement, and debugging of Keebler's remote sales order system. Created and debugged C++ programs, DLL's and Visual basic code, by using the DBASE database engine.

Thomas Gunt Enterprises

System Architect

Performed assessment of technical skill level of prospective employee applicants, test screening in Visual basic, Access, C, C++, NT networking, Unix programming and System Administration, x windows, Motif, TCP_IP, Novell, SQL, and analytical programming skill.

RAMS - RAMIS

System Architect

Designed and implemented database management system customize for the mechanical press industry. RAMIS tracts orders, purchase orders, invoices, accounts receivable and payable payments received and due, and multiple financial reports. System designed using visual basic, SQL, and Access.

Dubois Fabrics – Shipmaster

System Architect

Complete UPS shipping system for networks that integrates into the MAS90 accounting software designed to allow the user to barcode the sales order number and automatically receive a completed invoice, shipping labels, and code labels with minimum user entry. The system electronically interfaces with the scale, the multiple customers and inventory database, the UPS zone, and a personally created rate database, and prints a complete manifest at the end of the day; the system updates mass databases as well.

Dubois Fabrics – Windows

System Architect

Point of Sale Bar-coding system that enables users to enter customer number, items, and quantities, output a complete invoice, and update the Mass 90 invoice database as well.

Dubois Fabrics – Credit Alert

System Architect

Special integrated add-on program that verifies each customer updates on to the system, by accessing the customer databases, and check to see-to-see if his credit limit has been reached. If so, the program gives audible alert.

Dubois Fabrics – Paymaster

System Architect

Payroll system that lets every employee barcode his employee card and action updates the payroll and employee databases and print a daily report as well as maintains a permanent database.

Dubois Fabrics – Invreal

System Architect

Real-Time inventory control program that has a version for a radio frequency barcode reader and a portable barcode reader: Both versions allow the remote entry of idem and quantities, and immediately update the inventory database and print a complete inventory report at the end of the session.

General Motors Corporation

System Architect

Responsibilities include rotating through various departments to create custom software for the speed, efficiency, and reliability of that department. A few of the projects included: