

Stephen Engel - Work  
Project Manager  
Operations & Enterprise Communication Services  
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## SUMMARY

- Seasoned Information Technology Professional with experience in project management, architecture, and network infrastructure planning and deployment.
- Over ten (10) years as a Project Manager leading large-scale projects from inception to completion, with experience with systems development life cycles.
- Over ten (10) years Project Management experience planning, documenting, coordinating, leading team members, developing task schedules and work break-down structures, identifying risks, and estimating budgets.
- Project Management experience managing multiple projects concurrently.
- As Project Manager, coordinated and managed the County of Sacramento's VoIP Migration project which entails moving all phones from legacy GTD5 and Avaya switches to the new Cisco Enterprise Call Manager server cluster (Mar 2006 – Dec 2008).
- As Project Manager, coordinated and managed the decommissioning of the County of Sacramento, two GTD5 telecommunications switches and the liquidation of assets through the Counties surplus process which entails migrating existing phone services from the legacy GTD5 TTY switches to the new Enterprise Cisco Call Manager server cluster (Mar 2006 – Dec 2008).
- As Project Manager, coordinated and managed Sacramento Counties IVR (interactive voice response), AA (auto attendants) and Call Center application migration efforts from Octel to Unity or Cisco IPCC Enterprise Call Center. (Sep 2007 – Dec 2008)
- As Project Manager, coordinated and managed VoIP, wireless, and OPT-E-Man deployments and infrastructure upgrades for the Department of Revenue & Recovery. Represented the County of Sacramento in City Council and City Planning Commission meetings to negotiate the deployment of tower infrastructure within the County (Sep 2006 – Current 2008)
- As Project Manager, coordinated and managed for SRRCS - Sacramento Regional Radio Communications Services supporting the Motorola Simulcast and IR repeater projects, tower deployments and frequency re-banding in the City of Galt, City of Folsom, City of Citrus Heights, City of Rancho Cordova, City of Rancho Murieta, and County NACY. Primary interface between Sacramento County, Motorola and associated member agencies. Member of the TAC and SMG board. (Sep 2007 – Current 2008)
- As Project Manager, coordinated and managed the DHA migration from legacy ATM network services to the new OPT-E-MAN network service, a new Ethernet service offered by AT&T. (Sep 2006 – Sep 2007)
- As Project Manager, coordinated and managed broadband networking infrastructure development, including site development for the Mather AFB water tower and the Coloma telecommunications tower. (Sep 2007 – Dec 2008)
- As Project Manager, coordinated and managed the initial plan development for migrating DMV access from Sacramento County Mainframe SNA/CICS (Mar 2006 - Nov 2006)
- As Project Manager, coordinated and managed for California State Department of Health Services the deployment of a statewide enterprise network to interconnect several private Windows NT and Novell networks and the intranet services.
- Project Manager for QA/QC operations for the State of California Department of Corrections / TRW Inc. Statewide inmate management System (IMS).
- Engineering and Environmental Geology project management

## EDUCATION

- California State University, Sacramento, B.S. Degree in Earth Studies (Geology & Geography)
- American River Junior College, Sacramento, AA Degree in Computer Science
- Microsoft MCSE Windows 2000
- Cisco CCNA
- Microsoft Development Partner
- Novell CNE 2x/3x 1992
- Management training for Total Quality Management (TQM), Business Presentations, and ISO9000
- Registered PM with PMI – Project Management Institute

PROFESSIONAL EXPERIENCE

Jan 2009 – Present      **Sacramento County, OCIT**, Sacramento, CA  
Project Manager

Project management and project coordination for the Sacramento Regional Radio Communications System (SRRCS). Perform coordination and management of radio and tower deployments with SRRCS vendors and related Federal, State and local government agencies.

SRRCS is a network of radio communications equipment that supports a regional partnership of local government jurisdictions in the Northern California region with a 2 way mobile radio system. This system is used for law enforcement and general public services. Additionally, SRRCS manages and coordinates interoperability issues among its regional partnership.

Over 11,000 radios are in use. Sacramento County manages and maintains the System for the member agencies of the consortium. The primary users of the system are the following agencies: County of Sacramento, City of Sacramento, Cities of Folsom, Galt, Citrus Heights, Rancho Murietta, Rancho Cordova, West Sacramento, Sacramento Regional Fire/EMS Communications Center, Sacramento Regional Transit District, Grant Joint Union HS District Police Department, Sacramento Transportation Authority, and State of California-Department of Transportation.

In addition, there are 1400 secondary users including: The Federal Bureau of Investigation, Homeland Security, California Office of Emergency Services, Kaiser, Mercy, and Sutter Hospitals, American River and Cosumnes Colleges, and Courtland, Elk Grove, Walnut Grove, Wilton, and El Dorado Hills Fire Departments.

Mar 2006 – 12 2008      **Sacramento County, OCIT**, Sacramento, CA  
Project Manager

- In managing multiple OCIT projects, responsible for the facilitation and coordination of the project efforts.
- Project Manager of the County of Sacramento, OCIT, Enterprise VoIP Systems responsible for the management of the migration effort to move the existing telephone services from the GTD5 switches at Branch Center and Downtown to the new Enterprise Cisco Call Manager server cluster. (approximately 40,000 lines)
- Project Manager managing the move of all existing County of Sacramento, IP phones using the MSA Call Manager server cluster to the new Enterprise Cisco Call Manager server cluster.
- Project Manager managing the move/migration of all existing County of Sacramento, Auto Attendants (AA), Interactive Voice Response (IVR) and Call Centers to Unity and/or Cisco IPCC/UCCE Enterprise Server Cluster.
- Project Manager for a VoIP, wireless, and OPT-E-Man deployment infrastructure upgrade for the Department of Revenue & Recovery.
- Also acting as Project Manager by coordinating the DHA migration from legacy ATM network services to the new OPT-E-MAN network service, a new Ethernet service offered by AT&T.
- Project Manager for Sacramento County - SRRCS coordinated and managed radio and tower deployments with SRRCS vendors and related Federal, State and local government agencies.
- Project Manager for initial plan development for migrating DMV access through County mainframe SNA/CICS interface to direct extranet services.
- Responsible for reporting project progress to stake holders, development of work break down structures and critical path management. Coordination of project teams, and cross matrix communications.
- Responsible for project budgets, workload distribution, developing task schedules and monitoring project timelines.
- Member of County of Sacramento 3-1-1 committee and Sacramento County's E-Government Division Seniors

1996 – Present      **Cyberkinetics, Inc. NetQA.net**, Carson City, NV  
Project Manager

- As Project Manager, oversees the budget, scope, resources and timelines on many of NetQA outsource network and control monitoring projects. The primary focus of NetQA.net is in the provisioning and maintenance of outsourced network quality assurance and control monitoring services.
- In 2008 Cyberkinetics deployed StephensApiary.com, an Apis Mellifera - Honey Bee experiment that provides 24/7 climate and sensor telemetry from Apiary operations to Beekeepers to support Health & Welfare monitoring.
- In 2000 Cyberkinetics deployed NetQA.net services in a joint service offering with Orion Systems' VMIS an outsourced virtual MIS and infrastructure management service.

- NetQA.net provides 24/7 SNMP network and systems performance reporting through real-time web enabled reports.
- NetQA.net conducts systems, security, and network audits, and provides customized 24/7 monitoring and maintenance services.
- These services are maintained in part at the Sacramento data center and the Orion data center in Chicago and delivered over the Internet as an outsourced e-commerce application.

1996 – 1999 **Orion Systems, Inc.**, Bartlett, IL  
Project Manager/Senior Systems Engineer

Orion provides key ASP applications, Mr. Engel provided Project Management services surrounding managed network services, and integration to municipal police departments in Illinois, the Oakland Athletics in California, and other businesses in the process of outsourcing or developing MIS related services. Key areas of support:

- Project Management consulting in the provisioning of network services.
- Architecture design, deployment and management of Novell and Windows 2000 enterprise networks and servers.
- Project Management of client server applications, including Surgery Information Systems SIS for Sutter Health's independent surgery centers.
- Installation, configuration, and testing with HP OpenView, and MRTG.
- Development of enterprise management systems including Remedy AR 3.2 and Microsoft Operations Management, for automated Helpdesk, change-management, and quality assurance.
- Customer interface, technical support, and pre-sales engineering.

2003 – 2004 **ITT Technical Institute**, Rancho Cordova, CA  
Advanced Routing and Switching Instructor

Instruction in the routing fundamentals of data networks, and their related protocols as a part of the ITT Technical Institute's curriculum for a bachelor degree program in data communication and systems technology (IT370) and Cisco CCNA certification. The course includes both lectures and interactive labs on simulated; geographically dispersed network environments constructed with Cisco 2600 routers. Key concepts include configuring and optimizing RIP, IPX, EIGRP, OSPF, BGP-I, and BGP-II within the enterprise infrastructure. Network management, troubleshooting, and monitoring concepts with SNMP and ICMP are fully explored. Students learn the Problem-Solving Model for troubleshooting inter-networks and are introduced to diagnostic tools and analyzers including CiscoWorks, TrafficDirector, MRTG, NetSys, WAN Manager, and VLAN Monitor.

2002 – 2004 **Stockton Unified School District**, Stockton, CA  
Enterprise Support Engineer

Responsible for providing support and maintenance to the district WAN of 75 separate school LAN's running Novell and Microsoft network operating systems within a Cisco routing environment and currently deploying Cisco's VoIP. Support includes onsite desktop diagnostics, upgrades and configurations, new installations of desktop operating systems, printers, and other miscellaneous nodes. Emergency on call support engineer for district helpdesk and call center. Management of quality assurance and metric monitoring programs for analysis of district firewalls and performance of the internal network infrastructure.

6/01 – 7/01 **California State Franchise Tax Board** (Contract), Sacramento, CA  
HP OpenView Consultant

Consulted in the development of a performance monitoring strategy for the FTB E-file (electronic tax filing) system.

- Provided training in general network, server, and router data modeling techniques
- Conducted an initial installation of HP OpenView 6.2 for MS NT 4.0.
- Identified key variables within the environment for baseline analysis and threshold evaluation.
- Assisted in the policy development of ManageX (NT component of OpenView) performance monitoring tools.
- Configuration of SNMP collection services and web enabled reporting on related interfaces of the clustered server environment and the related management services of the enterprise network.
- Installation and configuration of email notification tools and development of customized event-response systems.
- Development of the baseline trend and threshold parameters for key services and components.

1999 – 2000 **California State Department of Health Services** (Contract), Sacramento, CA  
Project Manager Consultant

Project management and consulting services for the deployment of a large statewide enterprise network to interconnect several private Windows NT and Novell networks and the intranet services associated within the infrastructure. Y2K assessments.

- Coordinated efforts, and provided conflict resolution among several state and federal departments on the procedures and methodology of deployment.
- Managed risks, timelines, resources, workload distributions, task schedules/priorities, and budget.
- Also focused on the resources and services related to the Licensing & Certification offices and the dynamically changing environment of the MIS/IT branches of the DHS, and the federal branch of HCFA.
- Participated in the development and negotiation of the service level agreement process between Licensing & Certification, the DHS IT/MIS infrastructure (ITSD), The Health and Welfare Data Center (HWDC), and the federal branch of HCFA.
- Integration analysis of legacy SNA networking systems was conducted and short-term solutions were evaluated including Cisco dial on demand routing (DDR) solutions and virtual private networking (VPN) solutions.
- Representation of Licensing & Certification in key operating committee's including: the DHS Internet Standards Board which dealt with internet and intranet development standards, the change control process, and the State Forms Compliance Group which dealt with standardization issues for the deployment of electronic forms and information distribution procedures.
- Provided development services with Remedy change management and enterprise trouble ticketing systems.

1996 – 1997 **California State Department of Corrections** (Contract), Sacramento, CA  
QA Engineer

Development and implementation of a quality assurance program for the, "Inmate Information Management System," software development process.

- Chaired a committee of a diverse group of application architects responsible for the construction of each module of the application and developed programming standards and guidelines that were compiled into a publication.
- Conducted enforcement of the standards publication, through a comprehensive audit process.
- Constructed a library of SQL query tools for the purpose of independent verification and validation.
- Oversaw the construction of a metric monitoring system to monitor progress within the software development process including change management.
- Conducted reviews and audits, facilitated conflict resolution, and performed project requirements analysis.
- Participated in the deployment of Remedy change management systems.
- Performed extensive development with report designer and graphics designer within the Oracle Designer/Developer 2000 package.

1994 – 1995 **California State Department of Justice** (Contract), Sacramento, CA  
Network Security Consultant

Consulted a committee of managers in the Bureau of Forensic Services on the design, and management of local and wide area networks (LAN & WAN). As a relatively new technology within the State of California, these members needed to be trained on the complexities and relationships in electronic information, the physical infrastructure of its delivery and routing (OSI Model), and the management issues arising from enterprise network expectations and requirements.

Building network policies, streamlining user platforms, and building monitoring systems to insure performance and security requirements, were the focus of the instruction. The course included lectures on policies and guidelines related to:

- Data-centers, physical nodes, and protocols
- Layer 3 & 4 protocol transfer, and packet analysis tools
- Security, authentication, and a introduction to sockets and threads
- Pro-active systems and service management concepts including performance & security monitoring, reporting, event correlation, and escalation.

The course included laboratory work using Novell NMS and the Intel LANDesk application suite. Key network system metrics were identified and initial baselines were determined from data centers to end-users. Threshold reaction plans and escalation procedures were also discussed.

1994 - 1995 **Hansen Information Technologies**, Sacramento, CA  
Project Manager

Project Management for the implementation and modification life cycle of an Oracle based RDBMS "Infrastructure Management Software" dealing in municipal sewer, water, street, and gas utilities.

- Key point of contact with the customer during the post sales/implementation phase of the application rollout.
- Responsible for identifying risks, problem resolution, project schedule, planning workload distribution, and managing the complete implementation cycle.
- Responsible for meeting all contract requirements and insuring customer satisfaction.
- Supervision of client database migration and conversion.
- Architecture of new modules dealing with personnel toxic exposure tracking, digital images, and sewer service line TV inspection video.
- Proficiency with NT, UNIX, and Alpha systems running a variety of DBMS including Informix, GIS and Oracle. General exposure to CASE tools and SQL.
- Management of the company's Novell network, and responsible for procurement and provisioning of systems and networking services.
- Development and management of the network steering group to deploy network and application services to enhance business processes.

1992 – 1993 **Baxter Healthcare International** (MicroScan Division), Sacramento, CA  
Project Manager

Reporting directly to the VP of Operations, held responsibility for IT support operations at a manufacturing division for a \$9 billion Fortune 500 company.

- Managed a project budget in excess of \$800 thousand, including staff, other resources, risks and timelines.
- Re-designed a failing multi-server Novell environment with MS Windows 3.11.
- Produced comprehensive documentation of the 300+ workstations, cabling, hubs, repeaters, and routers.
- Maintained the division software distribution library.
- Developed software and hardware purchase policies.
- Created and implemented network policies within a multi-departmental environment.
- Translation of management objectives and end user needs to network services.
- Team Member of Divisional Operating Committee, Team Member of Divisional IS Steering Committee.
- Responsible for managing the 300 + user network, Helpdesk, technology training, and outside vendor and temporary support staff.
- Attended management training for Total Quality Management (TQM), Business Presentations, and ISO9000.

1993 – 1994 **Institute of Fluid Dynamics & Heat Transfer**, Technical University Vienna Austria  
Design Consultant

Participation in centrifugal design experiments.

- PC based digital imaging systems and development.
- Constructed a digital image studio to record and track particle locations during sedimentation within a centrifuge chamber. The studio included three axis mounted digital cameras, a strobe light, and a timing mechanism to synchronize chamber location with image plane. Additionally, an Access database was developed to manage still images and record particle types and locations.

1990 – 1992 **California State University Sacramento**, Sacramento, CA  
GIS Student Intern

- Procurement and development of hardware/software resources for experimental GIS/GPS computer lab.
- Installation and configuration of ESRI ArcInfo software.
- Development and management of departmental BBS.
- Special interest in development of remote geologic/geographic sensing systems.

1991 **ERM-West, Inc.**, Sacramento, CA  
Field Geologist

Conducted environmental field investigation and sampling services.

Managed a group of contractors for a large-scale soil sampling project at the U.S. Navel Weapons Depot, Concord.

Samples were collected by hand auger and all samples were mapped, logged, packaged, and delivered to the lab. The results of the tests were noted and processed via GEOEAS, a software program that produces contamination contours based on statistical analysis.

1990 – 1991 **Reay Environmental Services**, Sacramento, CA  
Field Geologist

Performed in the field primarily as a project field geologist performing groundwater monitoring well construction and development.

- Conducted water and soil sampling services with computer-based statistical analysis and CAD graphics production.
- Supported investigations and remediation studies at hazardous waste sites including, McClellan Air Force Base in Sacramento, a construction landfill in Sacramento, a belt buckle manufacturing company in El Dorado, and underground storage tank (UST) excavations at several locations throughout northern California.
- Utilized hollow-stem auger and split-spoon sampling methods.
- Conducted heavy equipment (backhoe, trucks and drilling rigs) supervision, and performed as onsite safety supervisor.
- Provided administration of CAD drawings and project related resource-scheduling files.
- OSHA certified 29 CFR 1910.12 (e) and as site safety supervisor.
- Familiarity with RCRA, ASTM, and EPA methods and standards

1985 – 1990 **Norman Janke Associates**, Sacramento, CA  
Field Geologist

Performed as an assistant to Dr. Norman Janke as he consulted on several large engineering, mining, and forensic investigations.

- Provided field sampling services, and sample preparation in the laboratory.
- Performed slide preparation on thin sections and grain or fiber samples using mineral and grain size separation techniques including, magnetic's, heavy liquids, amalgamation, sieve sets, hydrometer, elutriation systems, and sedimentation chambers.
- Used polarized light microscopy to conduct grain identification and perform statistical point counting, and pore space area calculations.
- Plotted grain size distributions with computer based graphing tools.
- Performed experiments with VCR's and microscope oculars to streamline the interpretation of voluminous thin section samples.
- Assisted in the deployment of geophones and received exposure to the graphing and interpretation of geophysical data.
- Conducted library research services and performed in general terms in the areas of fault/seismic evaluations, petrology, mining, environmental geology, geotechnical engineering, geophysical and geostatistical analysis.

1979 – 1983 **UNITED STATES NAVY, MILITARY SERVICE**  
Operations Specialist

- Specialist in radar and communications.
- Specialist in tactical data management.
- Participated in the development of radio based data networks; the Navel Tactical Data System NTDS.
- Conducted operation of the ANSPS-10 surface radar, ANSPS-48c air radar, and the SPS-40 long-range radar systems.
- Performance of air-intercept control, anti-submarine warfare, navel gunfire support, and search & rescue missions.
- Responsible for confidential document management, including reproduction, destruction, and distribution management.
- Four years of general experience in personnel management, firefighting, safety supervision, and team contribution.
- Two Western-Pacific deployments aboard the USS Fox CG-33.
- Decorations: Battle "E" Award, Sea Service Deployment Ribbon (2), Expeditionary Medal, and Humanitarian Service Medal (2).