



E&M Technologies, Inc. Commercial Price List

(Effective 1 January 2015)

Construction Manager	173.70	Project Manager I	125.56
Contracts Specialist	81.20	Project Manager II	135.00
Drafter/Designer	143.75	Project Manager III	147.60
Engineer Analyst	101.00	Project Manager IV	160.40
Electrical Engineer	173.70	Project Management and Planning Ops	70.94
Help-Desk Administrator	94.87	Quality Professional Staff Junior	143.96
Industrial Cleaner	179.69	Quality Professional Staff Senior	191.06
Information Architect	186.00	Senior Engineer Analyst III	123.49
Information Assurance Engineer Staff	101.44	Senior Information Architect	213.00
Information Assurance Specialist I	83.80	Senior Network Engineer	86.47
Information Assurance Specialist II	105.44	Senior Software Engineer	166.00
Information Assurance Specialist III	151.69	Senior Technical Engineer	129.83
Mechanical Engineer	161.72	Subject Matter Expert	163.47
Mid-Range Technical Contributor (Analytic) I	85.00	Systems Administrator Associate	39.73
Mid-Range Technical Contributor (Analytic) II	88.00	Systems Administrator	72.00
Mid-Range Technical Contributor (Analytic) III	90.76	Systems Engineer Staff	79.69
Mid-Range Technical Contributor (Analytic) IV	93.26	Systems Engineer	88.00
Multimedia Specialist I	88.00	Systems Engineer IT Senior Staff	102.25
Multimedia Specialist II	103.00	Systems Software Analyst I	80.00
Network Engineer I	72.00	Systems Software Analyst II	92.00
Network Engineer II	80.00	Systems Software Analyst III	103.00
Network Engineer III	93.00	Systems Software Analyst IV	113.00
Network Engineer IV	102.00	Systems Software Analyst V	131.00
Network Engineer V	115.00	Technical Writer	87.00
Planner/Scheduler	131.77	Test Engineer I	99.28
Principal Technical Advisor	131.00	Test Engineer II	112.82
Program Manager	266.00		
Program Manager/SME	172.08		
Programming/ Analysis Support Staff I	92.44		
Programming/ Analysis Support Staff II	95.02		
Programming/ Analysis Support Staff III	97.68		
Programming/ Analysis Support Staff IV	100.41		

Commercial Job Title: CONSTRUCTION MANAGER

Minimum/General Experience: Five plus years of experience Managing Construction projects. Ability to manage large and complex construction projects. Experience as a member of a familiarity with DOD organizations. TS/SCI with ability to obtain a CI Poly. Excellent communication skills.

Functional Responsibilities:

This position will be involved in every aspect of the design & construction process. It will be involved in the solicitation & selection of the designers, reviewing the product of these designs, participating in the interactive review meetings, recruiting builders to participate, issuing the RFP's/reviewing the proposals & coordinating the site visits. The position is required to be able to read/interpret design/construction documentation. The position is required to be able to perform site surveys, site evaluations & quantity takeoffs (Bills Of Material). The position requires the appropriate level of computer skill to create purchase requisitions, progress reports & spreadsheets as needed to convey project status. Provide oversight of the General Contractor's construction progress on a multitude of simultaneously running projects to ensure compliance, safety, controls & quality. Ensure all on-site personnel follow safety "best practices". Provide significant input into the creation & management of each project schedule, perform oversight of the construction portion of the Integrated Master Schedules (IMS) and status the IMS with the scheduler on a routine basis. Oversee development and /or streamlining operational processing and procedures related to construction, review and approve GC and subs' work execution plan. Responsible for implementation of risk management process for identification and mitigation of risks; work with Contractor to optimize sequencing of activities to prevent/mitigate schedule slips. Provide oversight and direction to on-site construction personnel.

Example of Duties:

In support of an O&M program for a mission critical customer responsible for the facilities operation and maintenance services to include construction, power generation, warehousing, medical support, temporary quarters, transportation systems, environmental health and safety, security, information technology, housing, as well as all aspects of maintaining and repairing the site and its ancillary buildings.

Desired Qualifications: Advance Degree in Engineering or Construction. FMA, BOMA, r PMP certification. Experience with FAR and DFAR. Working in remote and or overseas locations. Working knowledge of MS Project. Working knowledge of setting up & adhering to construction budgets.

Commercial Job Title: CONTRACTS SPECIALIST

Minimum/General Experience: Three plus years of experience Managing Construction projects. Ability to manage large and complex construction projects. Experience as a member of a familiarity with DOD organizations. TS/SCI with ability to obtain a CI Poly. Excellent communication skills.

Functional Responsibilities: Develop and execute strategies to establish a sustainable service provider network for the purpose of providing public record data/document acquisition, verification, and related services. Identify and implement cost containment and cost reduction strategies. Handle procurement processes for contract workers, independent contractors, and small businesses, including RFIs, RFPs, RFBs, bid vetting, negotiation, evaluate against vendor selection criteria, bid approval and contract award following established department guidelines. Draft, administer, and manage contracts, ensuring SLAs are met. Serve as ongoing Point of Contact for all communications between internal stakeholders and service providers. Perform ongoing quality monitoring and evaluation against SLAs, including volumes, quality and timeliness of services. Ensure compliance with contractual commitments and address non-compliance with service providers. Conduct and handle all aspects of the contract renewal, renegotiation, and recertification processes for service providers following established department guidelines. Act as court systems, processes and procedures knowledge expert, and build and maintain strong relationships with government entities. Resolve court access issues that inhibit public record collection. Proactively participate in identifying procedural and system process improvements. Proactively compile and maintain state, county, and court specific collection information using established Best Practices documentation templates and protocol. Maintain knowledge and understanding of this and related information. Execute contract cancellations with service providers for breach of contract following established department guidelines.

Minimum Education: Minimum 4 Year Degree.

Commercial Job Title: DRAFTER/DESIGNER

Minimum/General Experience: Active, fully adjudicated TS/SCI Clearance. Creating, organizing, and maintaining technical literature related to these designs. Full working knowledge of AutoCAD with 2-3 years relevant work experience in a Building Services environment. With minimal supervision, able to manage and support projects simultaneously. Excellent communication skills

Functional Responsibilities: Work closely to assigned Engineers &/or Architects to translate their concepts & Ideas onto paper to facilitate understandings & Discussions. Receive marked up drawings for mechanical and electrical services designs for buildings, and produce CAD drawings from those mark ups. Produce amendments and revisions to CAD drawings. Ensure company CAD standards are adhered to. Obtain necessary information from the CAD Manager for the design to proceed. Ensure internal Design Team is kept fully informed of all relevant CAD information. Ensure that all drawings have been properly checked.

Desired Qualifications: Some experience of AutoCAD MEP and/or REVIT MEP would be desirable. Degree Preferred.

Commercial Job Title: ENGINEER ANALYST

Minimum/General Experience: Four years of progressive experience in performing systems analysis, development, and implementation for business, mathematical, engineering or scientific settings using a variety of information technology resources. Has experience with current technologies and, where required for the task, emerging technologies. Experience in a combination of standards and policy development, research and analysis of information systems issues and trends, research and development in a technical discipline, and development of information systems. Experience in developing and providing technical and end user training on application software. Demonstrated ability to communicate orally and in writing. Must possess strong organizational skills and strong interpersonal skills to effectively relate to agency and customer needs. Supervisory experience in managing engineers, programmers, and analysts.

Functional Responsibilities: Formulates and defines system scope and objectives. Prepares detailed specifications for programs. Designs, codes, tests, debugs and documents programs. Analyses functional business applications and designs specifications for functional activities. Develops block diagrams and logic flow charts. Translates detailed design into computer software. Test, debug, and refines the computer software to produce the required product. Prepared required documentation, including both program-level and user-level documentation. Enhances software to reduce operating time or improved performance efficiency. Provides guidance and training to less experienced analysts/programmers.

Example of Duties: Contributes to and oversees the development and implementation of systems methods, procedures, and standards necessary to maintain the integrity, reliability, and maintainability of systems. Apply structured methodology to the planning, oversight, and status communication of a project with an understanding of object-oriented technologies for project management. Proficient with the principles of risk assessment and requirements specification. Understanding of requirements from clients and how to identify project risks. Familiarity with techniques used in each stage of development and understanding how decision made at each stage affect the life cycle of the project. Perform quality assurance function. Assists other staff members in the development of project plans, specifications and in the monitoring of progress. Works with minimal management supervision. Applies process improvement and reengineering methodologies and principles to conduct process modernization projects including process and data modeling, developing modern business methods, identifying best practices, and creating and assessing performance measures. Gathers information by developing and implementing data collection instruments and conducts surveys, document reviews and interviews. Provides group facilitation, interviewing, training, and provides additional forms of knowledge transfer. Facilitation support includes cross-functional team building, project scoping work sessions, facilitation using creative dynamics techniques, and conflict resolution techniques. Performs manual or automated modeling of process or data models, data flow diagrams, and simulation models.

Possible Job Titles: Software Engineer, Information Systems Engineer.

Minimum Education: Bachelor's degree in computer science, engineering, mathematics, or related field. Two years of experience can replace one year of education.

Commercial Job Title: ELECTRICAL ENGINEER

Minimum/General Experience: Must be a U.S. Citizen. Active, fully adjudicated TS/SCI Clearance with Poly. Professional licensed engineer (PE) in Electrical Engineering. Minimum of 15 years of experience which shall include mechanical and electrical systems, working with the government, working in a secure atmosphere, experience in data centers (power and cooling), configuration management experience and knowledge and experience with the Uptime Institute, SCADA and building management systems. Must be able to design packages and be a self-contained engineer. PMP and Lean Six Sigma Certifications preferred. NEC Expert Required. Experience with instrumental control. Prior DOD and OCONUS Facilities experience is a strong plus. Knowledge and experience with SAP is preferred. Must have native-like fluency in reading, writing, and speaking English.

Functional Responsibilities: Electrical Engineer will be responsible for the management, oversight and planning for engineering design, procurement, and construction or modifications to the installation that affect the performance of critical mission systems. This individual will approve and manage red line drawing, SOW's and ROM's for proposed engineering solutions and modifications to the installation. He/she will establish and maintain an engineering technical library and like informational repositories. The Electrical Engineer is responsible for the successful operation and planning associated with program related configuration management, project/construction management, recapitalization planning and engineering related functions. This individual should have considerable knowledge and understanding of how to engineer and design an electrical system from generation to rack mounted equipment. The Electrical Engineer for Power should have a thorough understanding of SCADA systems and Building Management Systems.

Desired Qualifications: Characteristics required for this position includes outstanding interpersonal and verbal communication skills. Ability to quickly and accurately match tenant's requirements with facilities features is critical

Commercial Job Title: HELP-DESK ADMINISTRATOR

Minimum/General Experience: Three years of progressive experience in providing help-desk support and administration with at least two years of experience in supporting and troubleshooting COTS software, Operating Systems and hardware malfunction.

Functional Responsibility: Under the supervision of a Task Manager or Project Manager provide help desk activity for purposes of resolving end-users hardware and software problem through telephone assistance for installation and configuration of personal computer hardware and peripherals, network client software and application software.

Example of Duties: Log trouble call and resolution into the helpdesk database (including problem and solution). Unresolved calls should be escalated to onsite technicians for resolution. Trouble call will be closed out when resolution is recorded. Track all incoming calls, scheduling appointments, ensuring call follow-up and maintain the Help-Desk data base tracking system. Provide technical assistance to end-users aimed at helping them develop their own applications using COTS software such as Excel, Word, Lotus Notes, Access, PowerPoint, etc. Provide assistance on the selection of appropriate hardware/software before the initiation of a project. Coordinate all applications development efforts with the assigned personnel, identify, analyze, and effect resolution in properly identifying and isolating the source of hardware and software problems. Provide end-users with practical, how-to advice, primarily focused on product functionality, configuration and documented features. Track problems in database to determine software and hardware 'lemons' or common problems that must be addressed on a higher level. Assist in identifying peripheral hardware supplies in support of information processing activities, such as toner cartridges and ink cartridges; but not including parts covered under other maintenance contracts. Maintain maintenance records on equipment. Contract warranty and maintenance agreement vendors for remedial and emergency repairs when hardware malfunctions occur. Develop operations, administrative, and quality assurance back up plans, as well as procedural documentation. Recognizing and taking appropriate action(s) with regard to equipment and/or software problems and notifying appropriate personnel of systems degradations. Complete incident reports for all critical or unusual occurrences, (i.e., workstation or server failures). Provide beginning-to-end problem management for critical or difficult-to-resolve problems; coordinate with other responsible personnel to ensure problem resolution. Develop and maintain the ability to address simple business line application issues, as well as direct more complex problems, perform other duties as assigned.

Possible Job Titles: Application Specialist, Customer Support Specialist, Junior LAN/WAN Specialist.

Minimum Education: Minimum High-School Diploma, or Microsoft Certified Product Specialist (MCP) Certification or equivalent.

Commercial Job Title: INDUSTRIAL CLEANER

Minimum Education and Experience: Due to the nature of the work, there are no universal education requirements for this position. Most training can be done on the job.

Functional Responsibilities: Using high-powered cleaning equipment and chemicals, the cleaner's responsibilities include scrubbing, pressure washing, polishing, and sanitizing assigned areas, equipment or buildings to required standards for health and safety, occupation and/or cleanliness.

Example of Duties: An industrial cleaner's function is to clean, sanitize and prepare equipment, buildings, and hazardous areas for public use, and to provide a better overall appearance.

Commercial Job Title: INFORMATION ARCHITECT

Minimum/General Experience: Under the supervision of the Senior Information Architect develop applications architectures for Government solutions. Possesses the capability to design or develop architectures for applications, implementation or software development plans, or integration plans based on different software and web environments. Has the ability to use experience and technical judgment to reach conclusions in the face of limited and/or uncertain data. Supervises or manages the application architecture and is considered a subject matter expert in the field. Capable of interfacing with teams of specialty Engineers working on complex software development projects.

Functional Responsibilities:

- ◆ Provides lead analysis for translating customer needs into the design of applications.
- ◆ Provides leadership or direction on innovative research associated with the development of application architectures.
- ◆ Performs management responsibilities for a program or staff for software architecture projects.
- ◆ May perform other duties as required

Example of Duties: Provide architecture for application and systems geared for enterprise deployment. Develop and design enterprise systems management and infrastructure topology for region-wide applications. Evaluate and recommend viable design alternatives, products, and services to existing network and applications configurations and deployment. Assess and provide feedback on complex designs and architectural modules through on-site analysis at different locations, and also through the vendors; devise and implement strategies for potential software and hardware solutions. Work with Senior Architect and provide assistants, feedback and input.

Possible Job Titles: Principal Engineer, Senior Communications Engineer, Engineer, Senior Computer Specialist.

Minimum Education: An advanced degree preferred or a Bachelor's degree in computer science, engineering, mathematics, or related field, with 5 years of practical experience, or equivalent.

Commercial Job Title: INFORMATION ASSURANCE ENGINEER STAFF

Minimum Education Level Experience: Bachelor's Degrees from an accredited college in a related discipline, or equivalent experience/combined education, with 9 years of professional experience; or 7 years of professional experience with a related Master's degree. Considered an emerging authority.

Job Description: Provides security engineering designs and implementation in all aspects of Information Assurance and Information Security (InfoSec) Engineering. Assesses and mitigates system security threats/risks throughout the program life cycle; validates system security requirements definition and analysis; establishes system security designs; implements security designs in hardware, software, data, and procedures; verifies security requirements; performs system certification and accreditation planning and testing and liaison activities, and supports secure systems operations and maintenance.

Commercial Job Title: INFORMATION ASSURANCE SPECIALIST I

Minimum Education Level Experience: Bachelor's Degree from an accredited college in a related discipline, or equivalent experience/combined education, with 5 years of professional experience

Job Description: Evaluate potential IA security risks and take appropriate corrective and recovery action. Perform system audits to assess security related factors within the NE. Diagnose and resolve IA problems in response to reported incidents. Provides security engineering designs and implementation in all aspects of Information Assurance and Information Security (InfoSec) Engineering. Assesses and mitigates system security threats/risks throughout the program life cycle; validates system security requirements definition and analysis; establishes system security designs; implements security designs in hardware, software, data, and procedures; verifies security requirements; performs system certification and accreditation planning and testing and liaison activities, and supports secure systems operations and maintenance. IAWF Level IAM I-III, GSEC or SEC+ or SCNP or SSCP.

- ◆ Determines enterprise information assurance and security standards
- ◆ Develops and implements information assurance/security standards and procedures
- ◆ Coordinates, develops, and evaluates security programs for an organization. Recommends information assurance/security solutions to support customers' requirements
- ◆ Performs IA activities as described in DoD 8570.01-M
- ◆ Analyzes and defines security requirements for a variety of computer and telecommunications issues
- ◆ Designs, develops, engineers, and implements solutions to requirements
- ◆ Gathers and organizes technical information about an organization's mission goals and needs, existing security products, and ongoing programs
- ◆ Performs risk analyses including risk assessment. Develops, analyzes, and implements security architecture(s) as appropriate

Commercial Job Title: INFORMATION ASSURANCE SPECIALIST II

Minimum Education Level Experience: Bachelor's Degree from an accredited college in a related discipline, or equivalent experience/combined education, with 9 years of professional experience

Job Description: Evaluate potential IA security risks and take appropriate corrective and recovery action. Perform system audits to assess security related factors within the NE. Diagnose and resolve IA problems in response to reported incidents. Provides security engineering designs and implementation in all aspects of Information Assurance and Information Security (InfoSec) Engineering. Assesses and mitigates system security threats/risks throughout the program life cycle; validates system security requirements definition and analysis; establishes system security designs; implements security designs in hardware, software, data, and procedures; verifies security requirements; performs system certification and accreditation planning and testing and liaison activities, and supports secure systems operations and maintenance. IAWF Level IAM I-III, GSEC or SEC+ or SCNP or SSCP.

- ◆ Determines enterprise information assurance and security standards
- ◆ Develops and implements information assurance/security standards and procedures
- ◆ Coordinates, develops, and evaluates security programs for an organization. Recommends information assurance/security solutions to support customers' requirements
- ◆ Performs IA activities as described in DoD 8570.01-M
- ◆ Analyzes and defines security requirements for a variety of computer and telecommunications issues
- ◆ Designs, develops, engineers, and implements solutions to requirements
- ◆ Gathers and organizes technical information about an organization's mission goals and needs, existing security products, and ongoing programs
- ◆ Performs risk analyses including risk assessment. Develops, analyzes, and implements security architecture(s) as appropriate

Commercial Job Title: INFORMATION ASSURANCE SPECIALIST III

Minimum Education Level Experience: Bachelor's/Master's Degree from an accredited college in a related discipline, or equivalent experience/combined education, with 14 years of professional experience

Job Description: Evaluate potential IA security risks and take appropriate corrective and recovery action. Perform system audits to assess security related factors within the NE. Diagnose and resolve IA problems in response to reported incidents. Provides security engineering designs and implementation in all aspects of Information Assurance and Information Security (InfoSec) Engineering. Assesses and mitigates system security threats/risks throughout the program life cycle; validates system security requirements definition and analysis; establishes system security designs; implements security designs in hardware, software, data, and procedures; verifies security requirements; performs system certification and accreditation planning and testing and liaison activities, and supports secure systems operations and maintenance. IAWF Level IAM I-III, GSEC or SEC+ or SCNP or SSCP.

- ◆ Determines enterprise information assurance and security standards
- ◆ Develops and implements information assurance/security standards and procedures
- ◆ Coordinates, develops, and evaluates security programs for an organization. Recommends information assurance/security solutions to support customers' requirements
- ◆ Performs IA activities as described in DoD 8570.01-M
- ◆ Analyzes and defines security requirements for a variety of computer and telecommunications issues
- ◆ Designs, develops, engineers, and implements solutions to requirements
- ◆ Gathers and organizes technical information about an organization's mission goals and needs, existing security products, and ongoing programs
- ◆ Performs risk analyses including risk assessment. Develops, analyzes, and implements security architecture(s) as appropriate

Commercial Job Title: MECHANICAL ENGINEER

Minimum/General Experience: Seven + years of direct experience. BS degree in Mechanical Engineering. Active, fully adjudicated TS/SCI Clearance with CI Poly. Familiarity with UMC, IMC, ASHRAE 90.1, UFC. Experience designing HVAC and Hydronic systems, data center cooling systems, Building Management Systems-BMS. Proficient in the use of computers for making engineering calculations, spreadsheets, and report writing.

Functional Responsibilities:

- ◆ Engineer will develop/design solutions for a variety of technical problems of moderate to extreme scope and complexity across the mechanical engineering discipline.
- ◆ Familiarity with REVIT 2014 and AutoCAD 2014 desirable.
- ◆ Excellent communication and leadership skills, as this individual will be working with both internal and external clients.
- ◆ The focus of this position is largely on the peer review of department drawings developed by other firms. When performing reviews the response must be technically and grammatically correct to ensure the professional quality of the response
- ◆ The role is inclusive of HVAC/ hydronic and data center design, and will be supporting a number of different project types on DoD facility.
- ◆ The applicant shall have an understanding of typical codes such as UMC, IMC, and UFC.
- ◆ Familiarity with Design Build delivery / other alternate delivery methods and DoD facilities with housing, dining facilities.

Example of Duties: Independently evaluates, selects and applies standard engineering techniques, procedures and criteria, using judgment in making adaptations and modifications. Performs responsible and varied engineering assignments requiring general familiarity with a broad field of engineering and knowledge of reciprocal effects of the work upon other disciplines. Independently performs all the tasks necessary to complete primary design elements for engineering works. Solves problems by use of combination of standard procedures, modifications of same or methods developed in previous assignments. Performance at this level requires developmental experience in a professional position. Receives general instructions on specific assignment objectives, complex features, and possible solutions. Assistance is provided on unusual problems and work is reviewed for application of sound professional judgment. Broad exposure to different types of projects including some experience across different business lines. This position requires proof of US Citizenship and a current TS/SCI Clearance and CI polygraph.

Commercial Job Title: MID-RANGE TECHNICAL CONTRIBUTOR (ANALYTIC) I

Minimum/General Experience: Four years of directly related experience in the design, development and implementation of systems software and/or business application systems for computer system using advanced programming languages.

Functional Responsibility: Requires specialized subject matter expertise in operating systems and related system software for computers in a large multi-user environment; The characteristics, capabilities, and uses of operating system components and related vendor supplies and software packages; Software systems including coding and assembly level, procedural and non-procedural, and job control languages; Operating systems and database systems, and teleprocessing systems; As well as extensive directly related and progressive experience; Knowledge is applied to research and evaluation significant impact or consequence involving highly specialized and technical areas impacting recommendations and development of new policies, procedures and services.

Example of Duties: Duties may include, but are not limited to the following: Design, code, implement, maintain, and evaluate computer operating software; Analyze existing hardware products and related commercial software packages to determine the feasibility of using existing products in place of developing new software in-house; Prepare technical specifications to be used in requests for proposals or quotations; Evaluate the impact of new applicants to determine their impact on existing operations and system software and system performance; Consult with technical and managerial personnel, and recommend solutions to identify problems affecting operating systems performance; Recommend technical standards and policies; Perform operating system generations; Analyze and coordinate with vendors for new versions of operating systems; Develop and implement procedures for back-up, restart, and recovery of all software components and major files; Coordinate with technical personnel of vendors for troubleshooting, maintaining, and implementing new software and hardware components to operating systems; Analyze computer performance statistics and make changes to the appropriate software components to attain maximum system performance; Coordinate with and assist staff members in implementing, maintaining, and troubleshooting teleprocessing, database, and other system software; Prepare and conduct training sessions for operations and programming personnel regarding programming and operation techniques and software concepts; Coordinate with application systems and programming personnel, and assist and advise them in the diagnosis and correction of software and hardware problems associated with application programs; May develop, program, and implement data center support systems; perform related duties as assigned.

Possible Job Titles: Web Developer, Graphic Designer, Multimedia Designer, Webmaster, Document Imaging/Management programmer, Database Administrator, Help-Desk Manager, Senior Test Specialist, Tester, LAN/WAN Specialist, Documentation Specialist and Scriptor.

Minimum Education: A Bachelor's degree with major coursework in computer science, engineering, mathematics, or equivalent.

Commercial Job Title: MID-RANGE TECHNICAL CONTRIBUTOR (ANALYTIC) II

Minimum/General Experience: Five years of experience in the design, development and implementation of systems software and/or business application systems for computer system using advanced programming languages.

Functional Responsibility: Requires specialized subject matter expertise in operating systems and related system software for computers in a large multi-user environment; The characteristics, capabilities, and uses of operating system components and related vendor supplies and software packages; Software systems including coding and assembly level, procedural and non-procedural, and job control languages; Operating systems and database systems, and teleprocessing systems; As well as extensive directly related and progressive experience; Knowledge is applied to research and evaluation significant impact or consequence involving highly specialized and technical areas impacting recommendations and development of new policies, procedures and services; Most frequently meets with administrative staff.

Example of Duties: Duties may include, but are not limited to the following: Design, code, implement, maintain, and evaluate computer operating software; Analyze existing hardware products and related commercial software packages to determine the feasibility of using existing products in place of developing new software in-house; Prepare technical specifications to be used in requests for proposals or quotations; Evaluate the impact of new applicants to determine their impact on existing operations and system software and system performance; Consult with technical and managerial personnel, and recommend solutions to identify problems affecting operating systems performance; Recommend technical standards and policies; Perform operating system generations; Analyze and coordinate with vendors for new versions of operating systems; Develop and implement procedures for back-up, restart, and recovery of all software components and major files; Coordinate with technical personnel of vendors for troubleshooting, maintaining, and implementing new software and hardware components to operating systems; Analyze computer performance statistics and make changes to the appropriate software components to attain maximum system performance; Coordinate with and assist staff members in implementing, maintaining, and troubleshooting teleprocessing, database, and other system software; Prepare and conduct training sessions for operations and programming personnel regarding programming and operation techniques and software concepts; Coordinate with application systems and programming personnel, and assist and advise them in the diagnosis and correction of software and hardware problems associated with application programs; May develop, program, and implement data center support systems; perform related duties as assigned.

Possible Job Titles: Web Developer, Sr. Graphic Designer, Multimedia Designer, Document Imaging/Management programmer, Database Administrator, Help-Desk Manager, Senior Test Specialist, LAN/WAN Specialist, Documentation Specialist, Webmaster and Scriptor, CAD Operator, Senior Customer Support Specialist.

Minimum Education: A Bachelor's degree with major coursework in computer science, engineering, mathematics, or related field, with 1-year practical experience, or equivalent.

Commercial Job Title: MID-RANGE TECHNICAL CONTRIBUTOR (ANALYTIC) III

Minimum/General Experience: Six years of directly related experience in the design, development and implementation of systems software and/or business application systems for computer system using advanced programming languages.

Functional Responsibility: Requires specialized subject matter expertise in operating systems and related system software for computers in a large multi-user environment; The characteristics, capabilities, and uses of operating system components and related vendor supplies and software packages; Software systems including coding and assembly level, procedural and nonprocedural, and job control languages; Operating systems and database systems, and teleprocessing systems; As well as extensive directly related and progressive experience; Knowledge is applied to research and evaluation significant impact or consequence involving highly specialized and technical areas impacting recommendations and development of new policies, procedures and services; Has functional or technical supervision over lower level positions of Systems Software Analyst I & II; Most frequently meets with administrative, management, and professional staff, as well as functional and/or programmatic subject matter specialists to influence, motivate and to act as a liaison for a program or department.

Example of Duties: Duties may include, but are not limited to the following: Design, code, implement, maintain, and evaluate computer operating software; Analyze existing hardware products and related commercial software packages to determine the feasibility of using existing products in place of developing new software in-house; Prepare technical specifications to be used in requests for proposals or quotations; Evaluate the impact of new applicants to determine their impact on existing operations and system software and system performance; Consult with technical and managerial personnel, and recommend solutions to identify problems affecting operating systems performance; Recommend technical standards and policies; Perform operating system generations; Analyze and coordinate with vendors for new versions of operating systems; Develop and implement procedures for back-up, restart, and recovery of all software components and major files; Coordinate with technical personnel of vendors for troubleshooting, maintaining, and implementing new software and hardware components to operating systems; Analyze computer performance statistics and make changes to the appropriate software components to attain maximum system performance; Coordinate with and assist staff members in implementing, maintaining, and troubleshooting teleprocessing, database, and other system software; Prepare and conduct training sessions for operations and programming personnel regarding programming and operation techniques and software concepts; Coordinate with application systems and programming personnel, and assist and advise them in the diagnosis and correction of software and hardware problems associated with application programs; May develop, program, and implement data center support systems; perform related duties as assigned.

Possible Job Titles: Web Developer, Sr. Graphic Designer, Multimedia Designer/Specialist, Document Imaging/Management programmer, Database Administrator, Help-Desk Manager, Senior Test Specialist, LAN/WAN Specialist, Documentation Specialist and Scriptor.

Minimum Education: A Bachelor's degree with major coursework in computer science, engineering, mathematics, or related field, with 2 years of practical experience, or equivalent.

Commercial Job Title: MID-RANGE TECHNICAL CONTRIBUTOR (ANALYTIC) IV

Minimum/General Experience: Eight years of directly related experience in the design, development and implementation of systems software and/or business application systems for computer system using advanced programming languages.

Functional Responsibility: Requires specialized subject matter expertise in operating systems and related system software for computers in a large multi-user environment; The characteristics, capabilities, and uses of operating system components and related vendor supplies and software packages; Software systems including coding and assembly level, procedural and nonprocedural, and job control languages; Operating systems and database systems, and teleprocessing systems; As well as extensive directly related and progressive experience; Knowledge is applied to research and evaluation significant impact or consequence involving highly specialized and technical areas impacting recommendations and development of new policies, procedures and services; Has functional or technical supervision over lower level positions of Systems Software Analyst I,II & III; Most frequently meets with administrative, management, and professional staff, as well as functional and/or programmatic subject matter specialists to influence, motivate and to act as a liaison for a program or department.

Example of Duties: Duties may include, but are not limited to the following: Design, code, implement, maintain, and evaluate computer operating software; Analyze existing hardware products and related commercial software packages to determine the feasibility of using existing products in place of developing new software in-house; Prepare technical specifications to be used in requests for proposals or quotations; Evaluate the impact of new applicants to determine their impact on existing operations and system software and system performance; Consult with technical and managerial personnel, and recommend solutions to identify problems affecting operating systems performance; Recommend technical standards and policies; Perform operating system generations; Analyze and coordinate with vendors for new versions of operating systems; Develop and implement procedures for back-up, restart, and recovery of all software components and major files; Coordinate with technical personnel of vendors for troubleshooting, maintaining, and implementing new software and hardware components to operating systems; Analyze computer performance statistics and make changes to the appropriate software components to attain maximum system performance; Coordinate with and assist staff members in implementing, maintaining, and troubleshooting teleprocessing, database, and other system software; Prepare and conduct training sessions for operations and programming personnel regarding programming and operation techniques and software concepts; Coordinate with application systems and programming personnel, and assist and advise them in the diagnosis and correction of software and hardware problems associated with application programs; May develop, program, and implement data center support systems; perform related duties as assigned.

Possible Job Titles: Web Developer, Sr. Graphic Designer, Multimedia Designer/Specialist, Document Imaging/Management programmer, Database Administrator, Help-Desk Manager, Senior Test Specialist, LAN/WAN Specialist, Documentation Specialist

Minimum Education: A Bachelor's degree with major coursework in computer science, engineering, mathematics, or related field, with 4 years of practical experience, or equivalent.

Commercial Job Title: MULTIMEDIA SPECIALIST LEVEL I

Minimum/General Experience: Four years of directly related experience in the design, development and implementation of systems software and/or business application systems for computer system using advanced programming languages.

Functional Responsibility: Requires specialized subject matter expertise in video and audio techniques, multimedia file formats, as well as in streaming technologies and protocols; possesses a background in movie/video making, sound recording, storyboarding and site mock-up, operating systems and related system software for computers in a large multi-user environment; The characteristics, capabilities, and uses of operating system components and related vendor supplies and software packages; Software systems including coding and assembly level, procedural and nonprocedural, and job control languages; Operating systems and database systems, and teleprocessing systems; As well as extensive directly related and progressive experience; Knowledge is applied to research and evaluation significant impact or consequence involving highly specialized and technical areas impacting recommendations and development of new policies, procedures and services.

Example of Duties: Duties may include, but are not limited to the following: Design, code, implement, maintain, and evaluate computer operating software; Analyze existing hardware products and related commercial software packages to determine the feasibility of using existing products in place of developing new software in-house; Prepare technical specifications to be used in requests for proposals or quotations; Evaluate the impact of new applicants to determine their impact on existing operations and system software and system performance; Consult with technical and managerial personnel, and recommend solutions to identify problems affecting operating systems performance; Recommend technical standards and policies; Perform operating system generations; Analyze and coordinate with vendors for new versions of operating systems; Develop and implement procedures for back-up, restart, and recovery of all software components and major files; Coordinate with technical personnel of vendors for troubleshooting, maintaining, and implementing new software and hardware components to operating systems; Analyze computer performance statistics and make changes to the appropriate software components to attain maximum system performance; Coordinate with and assist staff members in implementing, maintaining, and troubleshooting teleprocessing, database, and other system software; Prepare and conduct training sessions for operations and programming personnel regarding programming and operation techniques and software concepts; Coordinate with application systems and programming personnel, and assist and advise them in the diagnosis and correction of software and hardware problems associated with application programs; May develop, program, and implement data center support systems; perform related duties as assigned.

Possible Job Titles: Web Developer, Graphic Designer, Multimedia Designer, Webmaster, Document Imaging/Management programmer, Database Administrator, Help-Desk Manager, Senior Test Specialist, LAN/WAN Specialist, Documentation Specialist and Scriptor.

Minimum Education: A Bachelor's degree with major coursework in computer science, engineering, mathematics, with 1-year practical experience, or equivalent.

Commercial Job Title: MULTIMEDIA SPECIALIST LEVEL II/SYSTEMS SOFTWARE ANALYST LEVEL III

Minimum/General Experience: Six years of directly related experience in the design, development and implementation of systems software and/or business application systems for computer system using advanced programming languages.

Functional Responsibility: Requires specialized subject matter expertise in operating systems and related system software for computers in a large multi-user environment; The characteristics, capabilities, and uses of operating system components and related vendor supplies and software packages; Software systems including coding and assembly level, procedural and non-procedural, and job control languages; Operating systems and database systems, and teleprocessing systems; As well as extensive directly related and progressive experience; Knowledge is applied to research and evaluation significant impact or consequence involving highly specialized and technical areas impacting recommendations and development of new policies, procedures and services; Has functional or technical supervision over lower level positions of Systems Software Analyst I & II; Most frequently meets with administrative, management, and professional staff, as well as functional and/or programmatic subject matter specialists to influence, motivate and to act as a liaison for a program or department.

Example of Duties: Duties may include, but are not limited to the following: Design, code, implement, maintain, and evaluate computer operating software; Analyze existing hardware products and related commercial software packages to determine the feasibility of using existing products in place of developing new software in-house; Prepare technical specifications to be used in requests for proposals or quotations; Evaluate the impact of new applicants to determine their impact on existing operations and system software and system performance; Consult with technical and managerial personnel, and recommend solutions to identify problems affecting operating systems performance; Recommend technical standards and policies; Perform operating system generations; Analyze and coordinate with vendors for new versions of operating systems; Develop and implement procedures for back-up, restart, and recovery of all software components and major files; Coordinate with technical personnel of vendors for troubleshooting, maintaining, and implementing new software and hardware components to operating systems; Analyze computer performance statistics and make changes to the appropriate software components to attain maximum system performance; Coordinate with and assist staff members in implementing, maintaining, and troubleshooting teleprocessing, database, and other system software; Prepare and conduct training sessions for operations and programming personnel regarding programming and operation techniques and software concepts; Coordinate with application systems and programming personnel, and assist and advise them in the diagnosis and correction of software and hardware problems associated with application programs; May develop, program, and implement data center support systems; perform related duties as assigned.

Possible Job Titles: Web Developer, Sr. Graphic Designer, Multimedia Designer/Specialist, Document Imaging/Management programmer, Database Administrator, Help-Desk Manager, Senior Test Specialist, LAN/WAN Specialist, Documentation Specialist and Scriptor.

Minimum Education: A Bachelor's degree with major coursework in computer science, engineering, mathematics, or related field, with 2 years of practical experience, or equivalent.

Commercial Job Title: NETWORK ENGINEER LEVEL I

Minimum/General Experience: Four years of experience with at least one-year of full-time experience directly related in the implementation and maintenance of local and wide area network application systems; or completion of a job training program in networks or data communications certified by Novell, Microsoft.

Functional Responsibility: Positions in this class require specialized subject matter expertise in the operation of network systems including LANs and WANs. A Senior Network Engineer and/or Network Manager provide general direction. Responsibilities do not include direct supervision of other positions but may serve as lead workers. Positions in this class are distinguished from the Senior Network Engineer class in that the Senior: has a broader scope of analytical tasks; designs and implements network systems; has a greater responsibility for presentation and support of recommendations to decision-making levels; makes recommendations which have significant impact or consequences including the development of new policies, procedures and service; and may supervise administrative, professional or technical personnel.

Examples of Duties: Identifies, isolates, trouble-shoots and resolves operational problems related to local and wide area network systems (LAN/WAN); tests hardware and transmission media including micro-computers, hubs, network adapter cards, network software, cables and connectors; communicates with users regarding network failures and malfunctions; determines whether problems are due to hardware, software, cabling system, or operator error; operates a variety of diagnostic and test equipment as well as micro-computers, hubs, patch panels and cables involved in network access; provides technical expertise to personnel, administrators, and users concerning LAN/WAN concepts, operations and problems including a variety of platforms such as Novell, and Windows NT; communicates with internal staff regarding equipment, circuit failures, parts and network operations; researches and analyzes problems and equipment as assigned; responds to Help Desk tickets and some trouble tickets; installs and replaces network equipment and software at various user locations; utilizes portable test equipment to identify and resolve problems on-site; maintains records related to network installation and trouble calls; confers with users regarding basic and prospective needs for network requirements and services; assists other technical support staff and engineers to assure optimum system availability to users; follows department standards to ensure network system security; monitors systems to support and control network traffic; follows back-up, restart and recovery procedures for network applications including the proper rotation and labeling of tapes; learns and understands new LAN and WAN concepts, protocols; reads literature, attends classes, confers with colleagues to maintain and develop knowledge of industry trends, innovations, new designs; assists in evaluating and recommending network methods, upgrades, components and applications; evaluates security needs in order to establish system configurations; may consult with technical and managerial personnel to recommend solutions to identified problems affecting network applications and systems; assists in conducting on-site surveys to analyze and recommend network plans; assists in designing and developing network systems; assists in the preparation of technical specifications to be used in requests for proposals or quotations; assists in the development of procedures manuals, updating operational procedures and notification/training of users relevant to LANs/WANs; assists in evaluating new applications to determine their effect on existing applications and systems; trains clerical, technical and professional employees on systems and operations, reviews their work and provides input on evaluations and competency; evaluates and recommends viable system alternatives, products, and services to existing network configurations; performs other related duties as assigned.

Possible Job Title: Communications Engineer, LAN Engineer, and Training Specialist

Minimum Education: A Bachelor's degree in computer science, engineering, mathematics, or related field, with 1 year experience, or equivalent.

Commercial Job Title: NETWORK ENGINEER LEVEL II

Minimum/General Experience: Six years of experience with at least two-year of full-time experience directly related in the implementation and maintenance of local and wide area network application systems; or completion of a job training program in networks or data communications certified by Novell, Microsoft.

Functional Responsibility: Positions in this class require specialized subject matter expertise in the operation of network systems including LANs and WANs. A Senior Network Engineer and/or Network Manager provide general direction. Responsibilities do not include direct supervision of other positions but may serve as lead workers. Positions in this class are distinguished from the Senior Network Engineer class in that the Senior: has a broader scope of analytical tasks; designs and implements network systems; has a greater responsibility for presentation and support of recommendations to decision-making levels; makes recommendations which have significant impact or consequences including the development of new policies, procedures and service; and may supervise administrative, professional or technical personnel.

Examples of Duties: Identifies, isolates, trouble-shoots and resolves operational problems related to local and wide area network systems (LAN/WAN); tests hardware and transmission media including micro-computers, hubs, network adapter cards, network software, cables and connectors; communicates with users regarding network failures and malfunctions; determines whether problems are due to hardware, software, cabling system, or operator error; operates a variety of diagnostic and test equipment as well as micro-computers, hubs, patch panels and cables involved in network access; provides technical expertise to personnel, administrators, and users concerning LAN/WAN concepts, operations and problems including a variety of platforms such as Novell, and Windows NT; communicates with internal staff regarding equipment, circuit failures, parts and network operations; researches and analyzes problems and equipment as assigned; responds to Help Desk tickets and some trouble tickets; installs and replaces network equipment and software at various user locations; utilizes portable test equipment to identify and resolve problems on-site; maintains records related to network installation and trouble calls; confers with users regarding basic and prospective needs for network requirements and services; assists other technical support staff and engineers to assure optimum system availability to users; follows department standards to ensure network system security; monitors systems to support and control network traffic; follows back-up, restart and recovery procedures for network applications including the proper rotation and labeling of tapes; learns and understands new LAN and WAN concepts, protocols; reads literature, attends classes, confers with colleagues to maintain and develop knowledge of industry trends, innovations, new designs; assists in evaluating and recommending network methods, upgrades, components and applications; evaluates security needs in order to establish system configurations; may consult with technical and managerial personnel to recommend solutions to identified problems affecting network applications and systems; assists in conducting on-site surveys to analyze and recommend network plans; assists in designing and developing network systems; assists in the preparation of technical specifications to be used in requests for proposals or quotations; assists in the development of procedures manuals, updating operational procedures and notification/training of users relevant to LANs/WANs; assists in evaluating new applications to determine their effect on existing applications and systems; trains clerical, technical and professional employees on systems and operations, reviews their work and provides input on evaluations and competency; evaluates and recommends viable system alternatives, products, and services to existing network configurations; performs other related duties as assigned.

Possible Job Title: Communications Engineer, LAN Engineer, and Training Specialist

Minimum Education: A Bachelor's degree in computer science, engineering, mathematics, or related field, with 2 years of experience, or equivalent.

Commercial Job Title: NETWORK ENGINEER LEVEL III

Minimum/General Experience: Eight years of experience with at least three years of full time experience in the design, development, integration, implementation and /or maintenance of multi-protocol local and/ or wide area networks, and telecommunications system. Function as technical consultant to the business units

Functional Responsibility: Management level personnel provide general direction. Responsibilities include functional or technical supervision of lower level professional, technical or clerical positions. Positions in this class are distinguished from other related classes in that they require specialized subject matter expertise in the design/operation of network systems including LANs and WANs; knowledge is applied to research and evaluation involving innovative solutions and alternatives. Positions in this class are distinguished from those in the Network Engineer II class by: the advance level of technical expertise, experience and ability to evaluate solutions for networking requirements; making recommendations which have significant impact or consequences including the development of new policies, procedures and service.

Examples of Duties: Identifies, isolates, trouble-shoots and resolves operational problems related to local and wide area network systems (LAN/WAN); tests hardware and transmission media; communicates with users regarding network failures and malfunctions; determines whether problems are due to hardware, software, cabling system, or operator error; operates a variety of diagnostic and test equipment; provides technical expertise to personnel, administrators, and users concerning LAN/WAN concepts, operations and problems including a variety of platforms; communicates with internal staff regarding equipment, circuit failures, parts and network operations; researches and analyzes problems and equipment; answers calls for installations of printers, software; responds to Help Desk tickets and call tickets; utilizes portable test equipment to identify and resolve problems on-site; maintains records related to network installation and trouble calls; confers with users regarding basic and prospective needs for network requirements and services; assists other technical support staff and engineers to assure optimum system availability; follows department established standards to ensure network system security; monitors systems to support and control network traffic; follows back-up, restart and recovery procedures for network applications; reads literature, attends classes, confers with colleagues, etc. to maintain and develop knowledge of industry trends, innovations, new designs; evaluates security needs in order to establish system configurations and operating procedures; evaluates and recommends network methods, upgrades, components and applications for a wide variety of systems to achieve optimal efficiency; consults with technical and managerial personnel to recommend solutions to identified problems affecting network applications and systems; conducts on-site surveys to analyze and recommend network plans; formulates operational designs of a creative and innovative nature for the development and maintenance of LANs and WANs including connections to a large mainframes; prepares technical specifications to be used in requests for proposals or quotations for hardware and software applications; develops procedures manuals, updating operational procedures and notification/training of users relevant to LANs/WANs; evaluates and recommends viable system alternatives, products, and services to existing network configurations; trains employees on systems and procedures, sets priorities, reviews their work and provides input on evaluations; resolves difficult or complex network problems through on-site analysis at different locations, , and also through the vendors; devises and implements strategies for connection of independent networks.

Possible Job Titles: Principal Engineer, Senior Communications Engineer, Senior LAN Engineer, Senior Computer Specialist, and Senior Training Specialist.

Minimum Education: An advanced degree preferred or a Bachelor's degree in computer science, engineering, mathematics, or related field, with 3 years of practical experience, or equivalent.

Commercial Job Title: NETWORK ENGINEER LEVEL IV

Minimum/General Experience: Eight years of experience with at least four years of full time experience in the design, development, integration, implementation and /or maintenance of multi-protocol local and/ or wide area networks, and telecommunications system. Function as technical consultant to the business units.

Functional Responsibility: Positions in this class are distinguished from Network Engineer Level IV in that they require specialized subject matter expertise in the design, setup and configuration of catalysts, switches and routers; knowledge is applied to research and evaluation involving innovative solutions and alternatives. Positions in this class are distinguished from those in the Network Engineer Level III class by the advance level of technical expertise in providing advanced support and maintenance for enterprise wide Network.

Examples of Duties: Provide enterprise deployment by setting up and supporting cluster servers for high availability server systems. Implement web server farm through Windows Load Balancing Systems (WLBS). Develop and maintain enterprise systems management and disaster recovery procedures by establishing system configurations and operating procedures for Compaq Insight Manager, Cisco Works 2000 and Microsoft System Management Server (SMS). Provide enterprise Backup System through Arcserve and enterprise virus protection with Netshield and Virusscan. Evaluate and recommend viable system alternatives, products, and services to existing network configurations; resolve difficult or complex network problems through on-site analysis at different locations, and also through the vendors; devise and implement strategies for connection of independent networks.

Possible Job Titles: Principal Engineer, Senior Communications Engineer, Senior LAN Engineer, Senior Computer Specialist, Senior Training Specialist.

Minimum Education: An advanced degree preferred or a Bachelor's degree in computer science, engineering, mathematics, or related field, with 4 years of practical experience, or equivalent.

Commercial Job Title: NETWORK ENGINEER LEVEL V

Minimum/General Experience: Nine years of experience with at least five years of full time experience in the design, development, integration, implementation and /or maintenance of multi-protocol local and/ or wide area networks, and telecommunications system. Function as technical consultant to the business units.

Functional Responsibility: Positions in this class are distinguished from Network Engineer Level IV in that they require specialized subject matter expertise in the design, setup and configuration of catalysts, switches and routers; knowledge is applied to research and evaluation involving innovative solutions and alternatives. Positions in this class are distinguished from those in the Network Engineer Level IV class by the advance level of technical expertise in providing campus type network system design.

Examples of Duties: Design, setup, operate and maintain catalyst, switches and routers in an enterprise wide network. Provide enterprise deployment by setting up and supporting cluster servers for high availability server systems. Implement web server farm through Windows Load Balancing Systems (WLBS). Develop and maintain enterprise systems management and disaster recovery procedures by establishing system configurations and operating procedures for Compaq Insight Manager, Cisco Works 2000 and Microsoft System Management Server (SMS). Provide enterprise Backup System through Arcserve and enterprise virus protection with Netshield and Virusscan. Identify, isolate, trouble-shoots and resolve operational problems related to local and wide area network systems (LAN/WAN). Develop procedure manuals, updating operational procedures and notification/training of users relevant to LANs/WANs; evaluate and recommend viable system alternatives, products, and services to existing network configurations; resolve difficult or complex network problems through on-site analysis at different locations, and also through the vendors; devise and implement strategies for connection of independent networks.

Possible Job Titles: Principal Engineer, Senior Communications Engineer, Senior LAN Engineer, Senior Computer Specialist, Senior Training Specialist.

Minimum Education: An advanced degree preferred or a Bachelor's degree in computer science, engineering, mathematics, or related field, with 5 years of practical experience, or equivalent.



Commercial Job Title: PLANNER/SCHEDULER

Minimum/General Experience: Extensive experience in Microsoft Project with at least 7 years' experience working with variety of project sizes. Bachelor's Degree in Computer Science, Engineering or related course of study. Microsoft Certified Technology Specialist (MCTS) designation for MS Project 2010/2013 highly desirable. Excellent verbal and written communication skills. Outstanding interpersonal skills and ability to work cooperatively with all internal and external stakeholders.

Functional Responsibilities: Partners with program management as a proactive, integral member of the team. Develops and maintains the project schedules in support of business development efforts and implementation projects. Ensures that projects and program schedules and plans are horizontally and vertically integrated across company functional groups including Finance (Project Control), Engineering and Development. Monitors and reports the critical path and tracks overall schedule performance. Executes critical path analysis, schedule risk analysis and cost/schedule integration. Works with the project teams to develop solutions for mitigating schedule risk and achieving project goals and objectives. Assists in preparation of initial set up, weekly and monthly schedule reviews including summary overview, critical path, and variance reports. Work with Program Control Analysts to coordinate resource planning in cost and schedule tools. Supports customer scheduling audits, and reports program progress at internal/external program reviews. Implements and utilize earned value management and other project management techniques to gauge progress and identify performance variances to facilitate focus and intervention on critical areas.

Example of Duties: Serve as a Planner/Scheduler for a large operations and maintenance activity in an overseas location, and as a member of the Project Management Office. The selected candidate will lead the organization-wide implementation of standard WBS milestone based project schedules. In cooperation with Project Management, Engineering and our Clients, the Planner/Scheduler will develop and manage complex project schedules using MS Project on multiple projects. The ideal candidate will help establish and manage compliance with company scheduling and resource allocation standards. This position requires professional and practical experiences in program and project schedule development; maintenance and analysis in support of proposal development; transition to delivery and project close out. This position requires proof of US Citizenship and a current TS/SCI Clearance and CI polygraph.

Commercial Job Title: PRINCIPAL TECHNICAL ADVISOR / SYSTEMS SOFTWARE ANALYST LEVEL V

Minimum/General Experience: Ten years of directly related experience in the design, development and implementation of systems software and/or business application systems for computer system using advanced programming languages.

Functional Responsibility: Requires specialized subject matter expertise in operating systems and related system software for computers in a large multi-user environment; The characteristics, capabilities, and uses of operating system components and related vendor supplies and software packages; Software systems including coding and assembly level, procedural and non-procedural, and job control languages; Operating systems and database systems, and teleprocessing systems; As well as extensive directly related and progressive experience; Knowledge is applied to research and evaluation significant impact or consequence involving highly specialized and technical areas impacting recommendations and development of new policies, procedures and services; Has functional or technical supervision over lower level positions of Systems Software Analyst I, II, III & IV; Most frequently meets with administrative, management, and professional staff, as well as functional and/or programmatic subject matter specialists to influence, motivate and to act as a liaison for a program or department.

Example of Duties: Duties may include, but are not limited to the following: Design, code, implement, maintain, and evaluate computer operating software; Analyze existing hardware products and related commercial software packages to determine the feasibility of using existing products in place of developing new software in-house; Prepare technical specifications to be used in requests for proposals or quotations; Evaluate the impact of new applicants to determine their impact on existing operations and system software and system performance; Consult with technical and managerial personnel, and recommend solutions to identify problems affecting operating systems performance; Recommend technical standards and policies; Perform operating system generations; Analyze and coordinate with vendors for new versions of operating systems; Develop and implement procedures for back-up, restart, and recovery of all software components and major files; Coordinate with technical personnel of vendors for troubleshooting, maintaining, and implementing new software and hardware components to operating systems; Analyze computer performance statistics and make changes to the appropriate software components to attain maximum system performance; Coordinate with and assist staff members in implementing, maintaining, and troubleshooting teleprocessing, database, and other system software; Prepare and conduct training sessions for operations and programming personnel regarding programming and operation techniques and software concepts; Coordinate with application systems and programming personnel, and assist and advise them in the diagnosis and correction of software and hardware problems associated with application programs; May develop, program, and implement data center support systems; perform related duties as assigned.

Possible Job Titles: Web Developer, Sr. Graphic Designer, Multimedia Designer/Specialist, Document Imaging/Management programmer, Database Administrator, Help-Desk Manager, Principal Technical Advisor, Senior Test Specialist, LAN/WAN Specialist, Documentation Specialist.

Minimum Education: A Bachelor's degree with major coursework in computer science, engineering, mathematics, or related field, with 6 years of practical experience, or equivalent.

Commercial Job Title: PROGRAM MANAGER

Minimum/General Experience: Practical experience in defining, developing, and managing government and private programs in accord with project management processes and procedures. Having previous experience in a multi-disciplinary methodological and technical environment. Excellent client interface, coordination and verbal/written communications skills. Experience in the structured software development environment. Must have the ability to work independently, proactively and with sensitivity to Government/Federal cultural, political, and organizational considerations.

Functional Responsibilities: The Program Management Analyst serves as the Project Manager on multi-contractor Project Management engagements developing, implementing and operating project and program management functions as outlined by PMI.

1. The Program Manager will lead the establishment of a common framework, processes, procedures, tools, measurement and reporting of project operations consistent with the governing lifecycle methodologies.
2. During operational cycles, you will be responsible for proactive data collection, data analyses, tracking, monitoring and control, reporting, action item/issue coordination and execution of concurrent projects.
3. These activities will include the following management disciplines:
 - ◆ Risk & Issue Management
 - ◆ Quality Assurance
 - ◆ Stakeholder Management
 - ◆ Requirements development (business, systems, and training)
 - ◆ Business analysis
 - ◆ Functional design, testing, implementation and on-going support for new systems needs

Example of Duties: Duties may include, but are not limited to the following: Plan, organize and administer program activities and services; select, train, supervise and evaluate the performance of staff; serve as resource to staff; prepare and implement a marketing strategy to promote the program services; make presentations to groups and clients; develop budgets and oversee administration of program budget components; identify funding sources and work with accounting personnel to ensure that accounts follow funding source regulations and requirements; make financial projections which may combine funding from different sources; prepare and negotiate contracts for the delivery of program services, negotiate contracts for services performed for the program by individual consultants; assist in the development and implementation of project or program policy guidelines and procedures; make suggested revisions and implement changes; developments and strategies affecting program objectives and results; prepare specialized reports, surveys and other program descriptive information and materials; monitor program data and information collection methods and techniques, perform related duties as assigned.

Possible Job Titles: Technical Account Manager, Technical Consultant, Engagement Manager.

Minimum Education: An MBA degree and Bachelor's degree with major coursework in computer science, engineering, mathematics, or equivalent.

Commercial Job Title: PROGRAM MANAGER / SME

Minimum/General Experience: The Subject Matter Expert shall have a minimum of ten (10) years of computer systems analysis and design experience in any combination of the following areas: (a) Assessing requirements for new or modified technical capabilities for financial and budgeting operations, (b) Assessing requirements for new or modified technical capabilities for information technology systems operation, performing detailed systems design, preparing written specification and programming; and (c) Software architecture design, structured analysis and design techniques for system architecture's

Functional Responsibilities:

- ◆ The Subject Matter Expert shall be knowledgeable of pertinent Government and commercial standards.
- ◆ Serves as subject matter expert, possessing in-depth knowledge of a particular area, such as business, computer science, engineering, mathematics, or the various sciences
- ◆ Provides technical knowledge and analysis of highly specialized applications and operational environments, high-level functional systems analysis, design, integration, documentation and implementation advice on exceptionally complex problems that need extensive knowledge of the subject matter for effective implementation
- ◆ Participates as needed in all phases of software development with emphasis on the planning, analysis, testing, integration, documentation, and presentation phases

Possible Job Titles: Senior Systems Engineer, Senior Principal Analyst.

Minimum Education: The Subject Matter Expert shall have a Bachelor's degree in Computer Science, Business Administration, or equivalent; plus four (4) years of experience in the required areas or any combinations of undergraduate study. Each year of graduate study equals one (1) year of experience, to a maximum of three (3) years.

Commercial Job Title: PROGRAMMING / ANALYSIS SUPPORT STAFF I

Minimum/General Experience: Four years of directly related experience in the design, development and implementation of systems software and/or business application systems for computer system using advanced programming languages.

Functional Responsibility: Requires specialized subject matter expertise in operating systems and related system software for computers in a large multi-user environment; The characteristics, capabilities, and uses of operating system components and related vendor supplies and software packages; Software systems including coding and assembly level, procedural and non-procedural, and job control languages; Operating systems and database systems, and teleprocessing systems; As well as extensive directly related and progressive experience; Knowledge is applied to research and evaluation significant impact or consequence involving highly specialized and technical areas impacting recommendations and development of new policies, procedures and services.

Example of Duties: Duties may include, but are not limited to the following: Design, code, implement, maintain, and evaluate computer operating software; Analyze existing hardware products and related commercial software packages to determine the feasibility of using existing products in place of developing new software in-house; Prepare technical specifications to be used in requests for proposals or quotations; Evaluate the impact of new applicants to determine their impact on existing operations and system software and system performance; Consult with technical and managerial personnel, and recommend solutions to identify problems affecting operating systems performance; Recommend technical standards and policies; Perform operating system generations; Analyze and coordinate with vendors for new versions of operating systems; Develop and implement procedures for back-up, restart, and recovery of all software components and major files; Coordinate with technical personnel of vendors for troubleshooting, maintaining, and implementing new software and hardware components to operating systems; Analyze computer performance statistics and make changes to the appropriate software components to attain maximum system performance; Coordinate with and assist staff members in implementing, maintaining, and troubleshooting teleprocessing, database, and other system software; Prepare and conduct training sessions for operations and programming personnel regarding programming and operation techniques and software concepts; Coordinate with application systems and programming personnel, and assist and advise them in the diagnosis and correction of software and hardware problems associated with application programs; May develop, program, and implement data center support systems; perform related duties as assigned.

Possible Job Titles: Web Developer, Graphic Designer, Multimedia Designer, Webmaster, Document Imaging/Management programmer, Database Administrator, Help-Desk Manager, Senior Test Specialist, Tester, LAN/WAN Specialist, Documentation Specialist and Scriptor.

Minimum Education: A Bachelor's degree with major coursework in computer science, engineering, mathematics, or equivalent.

Commercial Job Title: PROGRAMMING / ANALYSIS SUPPORT STAFF II

Minimum/General Experience: Five years of experience in the design, development and implementation of systems software and/or business application systems for computer system using advanced programming languages.

Functional Responsibility: Requires specialized subject matter expertise in operating systems and related system software for computers in a large multi-user environment; The characteristics, capabilities, and uses of operating system components and related vendor supplies and software packages; Software systems including coding and assembly level, procedural and non-procedural, and job control languages; Operating systems and database systems, and teleprocessing systems; As well as extensive directly related and progressive experience; Knowledge is applied to research and evaluation significant impact or consequence involving highly specialized and technical areas impacting recommendations and development of new policies, procedures and services; Most frequently meets with administrative staff.

Example of Duties: Duties may include, but are not limited to the following: Design, code, implement, maintain, and evaluate computer operating software; Analyze existing hardware products and related commercial software packages to determine the feasibility of using existing products in place of developing new software in-house; Prepare technical specifications to be used in requests for proposals or quotations; Evaluate the impact of new applicants to determine their impact on existing operations and system software and system performance; Consult with technical and managerial personnel, and recommend solutions to identify problems affecting operating systems performance; Recommend technical standards and policies; Perform operating system generations; Analyze and coordinate with vendors for new versions of operating systems; Develop and implement procedures for back-up, restart, and recovery of all software components and major files; Coordinate with technical personnel of vendors for troubleshooting, maintaining, and implementing new software and hardware components to operating systems; Analyze computer performance statistics and make changes to the appropriate software components to attain maximum system performance; Coordinate with and assist staff members in implementing, maintaining, and troubleshooting teleprocessing, database, and other system software; Prepare and conduct training sessions for operations and programming personnel regarding programming and operation techniques and software concepts; Coordinate with application systems and programming personnel, and assist and advise them in the diagnosis and correction of software and hardware problems associated with application programs; May develop, program, and implement data center support systems; perform related duties as assigned.

Possible Job Titles: Web Developer, Sr. Graphic Designer, Multimedia Designer, Document Imaging/Management programmer, Database Administrator, Help-Desk Manager, Senior Test Specialist, LAN/WAN Specialist, Documentation Specialist, Webmaster and Scriptor, CAD Operator, Senior Customer Support Specialist.

Minimum Education: A Bachelor's degree with major coursework in computer science, engineering, mathematics, or related field, with 1-year practical experience, or equivalent.

Commercial Job Title: PROGRAMMING / ANALYSIS SUPPORT STAFF III

Minimum/General Experience: Six years of directly related experience in the design, development and implementation of systems software and/or business application systems for computer system using advanced programming languages.

Functional Responsibility: Requires specialized subject matter expertise in operating systems and related system software for computers in a large multi-user environment; The characteristics, capabilities, and uses of operating system components and related vendor supplies and software packages; Software systems including coding and assembly level, procedural and nonprocedural, and job control languages; Operating systems and database systems, and teleprocessing systems; As well as extensive directly related and progressive experience; Knowledge is applied to research and evaluation significant impact or consequence involving highly specialized and technical areas impacting recommendations and development of new policies, procedures and services; Has functional or technical supervision over lower level positions of Systems Software Analyst I & II; Most frequently meets with administrative, management, and professional staff, as well as functional and/or programmatic subject matter specialists to influence, motivate and to act as a liaison for a program or department.

Example of Duties: Duties may include, but are not limited to the following: Design, code, implement, maintain, and evaluate computer operating software; Analyze existing hardware products and related commercial software packages to determine the feasibility of using existing products in place of developing new software in-house; Prepare technical specifications to be used in requests for proposals or quotations; Evaluate the impact of new applicants to determine their impact on existing operations and system software and system performance; Consult with technical and managerial personnel, and recommend solutions to identify problems affecting operating systems performance; Recommend technical standards and policies; Perform operating system generations; Analyze and coordinate with vendors for new versions of operating systems; Develop and implement procedures for back-up, restart, and recovery of all software components and major files; Coordinate with technical personnel of vendors for troubleshooting, maintaining, and implementing new software and hardware components to operating systems; Analyze computer performance statistics and make changes to the appropriate software components to attain maximum system performance; Coordinate with and assist staff members in implementing, maintaining, and troubleshooting teleprocessing, database, and other system software; Prepare and conduct training sessions for operations and programming personnel regarding programming and operation techniques and software concepts; Coordinate with application systems and programming personnel, and assist and advise them in the diagnosis and correction of software and hardware problems associated with application programs; May develop, program, and implement data center support systems; perform related duties as assigned.

Possible Job Titles: Web Developer, Sr. Graphic Designer, Multimedia Designer/Specialist, Document Imaging/Management programmer, Database Administrator, Help-Desk Manager, Senior Test Specialist, LAN/WAN Specialist, Documentation Specialist and Scriptor.

Minimum Education: A Bachelor's degree with major coursework in computer science, engineering, mathematics, or related field, with 2 years practical experience, or equivalent.

Commercial Job Title: PROGRAMMING / ANALYSIS SUPPORT STAFF IV

Minimum/General Experience: Eight years of directly related experience in the design, development and implementation of systems software and/or business application systems for computer system using advanced programming languages.

Functional Responsibility: Requires specialized subject matter expertise in operating systems and related system software for computers in a large multi-user environment; The characteristics, capabilities, and uses of operating system components and related vendor supplies and software packages; Software systems including coding and assembly level, procedural and nonprocedural, and job control languages; Operating systems and database systems, and teleprocessing systems; As well as extensive directly related and progressive experience; Knowledge is applied to research and evaluation significant impact or consequence involving highly specialized and technical areas impacting recommendations and development of new policies, procedures and services; Has functional or technical supervision over lower level positions of Systems Software Analyst I,II & III; Most frequently meets with administrative, management, and professional staff, as well as functional and/or programmatic subject matter specialists to influence, motivate and to act as a liaison for a program or department.

Example of Duties: Duties may include, but are not limited to the following: Design, code, implement, maintain, and evaluate computer operating software; Analyze existing hardware products and related commercial software packages to determine the feasibility of using existing products in place of developing new software in-house; Prepare technical specifications to be used in requests for proposals or quotations; Evaluate the impact of new applicants to determine their impact on existing operations and system software and system performance; Consult with technical and managerial personnel, and recommend solutions to identify problems affecting operating systems performance; Recommend technical standards and policies; Perform operating system generations; Analyze and coordinate with vendors for new versions of operating systems; Develop and implement procedures for back-up, restart, and recovery of all software components and major files; Coordinate with technical personnel of vendors for troubleshooting, maintaining, and implementing new software and hardware components to operating systems; Analyze computer performance statistics and make changes to the appropriate software components to attain maximum system performance; Coordinate with and assist staff members in implementing, maintaining, and troubleshooting teleprocessing, database, and other system software; Prepare and conduct training sessions for operations and programming personnel regarding programming and operation techniques and software concepts; Coordinate with application systems and programming personnel, and assist and advise them in the diagnosis and correction of software and hardware problems associated with application programs; May develop, program, and implement data center support systems; perform related duties as assigned.

Possible Job Titles: Web Developer, Sr. Graphic Designer, Multimedia Designer/Specialist, Document Imaging/Management programmer, Database Administrator, Help-Desk Manager, Senior Test Specialist, LAN/WAN Specialist, Documentation Specialist

Minimum Education: A Bachelor's degree with major coursework in computer science, engineering, mathematics, or related field, with 4 years of practical experience, or equivalent.

Commercial Job Title: PROJECT MANAGER LEVEL I

Minimum/General Experience: Four years' experience in the design, development, and implementation of business or computer systems and programs. At least two years working in a multi-task program environment. Knowledge of the Federal contract and procurement regulations.

Functional Responsibility: Assisting management with major programs, following work plans, schedules, evaluation criteria, and assist in utilizing resources in the most effective and efficient manner; confer with personnel in feasibility studies, systems, planning equipment scheduling, and activities as assigned. Enforce established applications programming, and documentation; plan and create work items for future Budget Years and participate in the preparation of current budget; plan and develop, review, and enforce policies, practices and standards, including programming and documentation standards; manage current projects through contract process and construction, continually keeping program data up to date for current year; work with government personnel and co-ordinate efforts to populate and maintain work items in database; support development of work items and assist with execution; maintain liaison with management and government personnel; communicate, coordinate, and cooperate with staff members to assure that the Network and Information Services is operating at maximum efficiency; supervise and participate in the selection, training, and evaluation of staff members; perform related duties as assigned.

Examples of Duties: Duties may include, but are not limited to the following: Plan, organize and administer program activities and services; serve as resource to staff; advise and provide technical recommendations to delegated building program managers; assist with identifying specific data as it relates to government or client responsibility; provide data analysis for FY budget submissions; advise and provide technical recommendations to Asset Managers, Portfolio Development, Special Services and many other parts of the government organization as needed; make presentations to groups and clients; identify funding sources and work with accounting personnel to ensure that accounts follow funding source regulations and requirements; make financial projections which may combine funding from different sources; assist in the development and implementation of project or program policy guidelines and procedures; make suggested revisions and implement changes; prepare specialized reports, surveys and other program descriptive information and materials; monitor program data and information collection methods and techniques, provide estimating and scheduling services, meet with customers, interact with various government personnel; support management staff at meetings and perform related duties as assigned.

Possible Job Titles: Software Quality Assurance Manager, Software Manager, Field Manager, Engineer, Planner, Technician.

Minimum Education: Associates Degree or greater required plus 2 years of practical experience, or equivalent.

Commercial Job Title: PROJECT MANAGER LEVEL II

Minimum/General Experience: Six years' experience in the design, development, and implementation of business or computer systems and programs. At least two years acting in a management role of a large multi-task program. Knowledge of the Federal contract and procurement regulations.

Functional Responsibility: Develop overall work plans, schedules, evaluation criteria, and assist in utilizing resources in the most effective and efficient manner; confer with personnel in feasibility studies, systems, planning equipment scheduling, and activities as assigned. Enforce established applications programming, and documentation; review the work effectiveness, task effectiveness and compatibility with other projects in related areas; supervise the preparation and administration of the budget for assigned areas of responsibility; participate in the preparation of the budget; develop, review, and enforce policies, practices and standards, including programming and documentation standards; review technical training needs for subordinate staff, plan activities implement training courses as appropriate and assure attendance by appropriate staff as required; maintain liaison with management and government personnel; communicate, coordinate, and cooperate with staff members to assure that the Network and Information Services is operating at maximum efficiency; supervise and participate in the selection, training, and evaluation of staff members; perform related duties as assigned.

Examples of Duties: Duties may include, but are not limited to the following: Plan, organize and administer program activities and services; select, train, supervise and evaluate the performance of staff; serve as resource to staff; prepare and implement a marketing strategy to promote the program services; make presentations to groups and clients; develop budgets and oversee administration of program budget components; identify funding sources and work with accounting personnel to ensure that accounts follow funding source regulations and requirements; make financial projections which may combine funding from different sources; prepare and negotiate contracts for the delivery of program services, negotiate contracts for services performed for the program by individual consultants; assist in the development and implementation of project or program policy guidelines and procedures; make suggested revisions and implement changes; developments and strategies affecting program objectives and results; prepare specialized reports, surveys and other program descriptive information and materials; monitor program data and information collection methods and techniques, perform related duties as assigned.

Possible Job Titles: Software Quality Assurance Manager, Software Manager, Field Manager.

Minimum Education: Bachelor's degree in computer science, engineering, mathematics, business, plus 2 years of practical experience, or equivalent.

Commercial Job Title: PROJECT MANAGER LEVEL III

Minimum/General Experience: Eight years' experience in the design, development, and implementation of business or computer systems and programs. At least three years acting in a management role of a large multi-task program. Knowledge of the Federal contract and procurement regulations.

Functional Responsibility: Develop overall work plans, schedules, evaluation criteria, and assist in utilizing resources in the most effective and efficient manner; confer with personnel in feasibility studies, systems, planning equipment scheduling, and activities as assigned. Enforce established applications programming, and documentation; review the work effectiveness, task effectiveness and compatibility with other projects in related areas; supervise the preparation and administration of the budget for assigned areas of responsibility; participate in the preparation of the budget; develop, review, and enforce policies, practices and standards, including programming and documentation standards; review technical training needs for subordinate staff, plan activities implement training courses as appropriate and assure attendance by appropriate staff as required; maintain liaison with management and government personnel; communicate, coordinate, and cooperate with staff members to assure that the Network and Information Services is operating at maximum efficiency; supervise and participate in the selection, training, and evaluation of staff members; perform related duties as assigned.

Examples of Duties: Duties may include, but are not limited to the following: Plan, organize and administer program activities and services; select, train, supervise and evaluate the performance of staff; serve as resource to staff; prepare and implement a marketing strategy to promote the program services; make presentations to groups and clients; develop budgets and oversee administration of program budget components; identify funding sources and work with accounting personnel to ensure that accounts follow funding source regulations and requirements; make financial projections which may combine funding from different sources; prepare and negotiate contracts for the delivery of program services, negotiate contracts for services performed for the program by individual consultants; assist in the development and implementation of project or program policy guidelines and procedures; make suggested revisions and implement changes; developments and strategies affecting program objectives and results; prepare specialized reports, surveys and other program descriptive information and materials; monitor program data and information collection methods and techniques, perform related duties as assigned.

Possible Job Titles: Software Quality Assurance Manager, Software Manager.

Minimum Education: Bachelor's degree in computer science, engineering, mathematics, business, plus 4 years of practical experience, or equivalent.

Commercial Job Title: PROJECT MANAGER LEVEL IV

Minimum/General Experience: Ten years of experience in the design, development, and implementation of business or computer systems and programs. At least six years acting in a management role of a large multi-task program. Knowledge of the Federal contract and procurement regulations.

Functional Responsibility: Develop overall work plans, schedules, evaluation criteria, and assist in utilizing resources in the most effective and efficient manner; confer with personnel in feasibility studies, systems, planning equipment scheduling, and activities as assigned. Enforce established applications programming, and documentation; review the work effectiveness, task effectiveness and compatibility with other projects in related areas; supervise the preparation and administration of the budget for assigned areas of responsibility; participate in the preparation of the budget; develop, review, and enforce policies, practices and standards, including programming and documentation standards; review technical training needs for subordinate staff, plan activities implement training courses as appropriate and assure attendance by appropriate staff as required; maintain liaison with management and government personnel; communicate, coordinate, and cooperate with staff members to assure that the Network and Information Services is operating at maximum efficiency; supervise and participate in the selection, training, and evaluation of staff members; perform related duties as assigned.

Examples of Duties: Duties may include, but are not limited to the following: Plan, organize and administer program activities and services; select, train, supervise and evaluate the performance of staff; serve as resource to staff; prepare and implement a marketing strategy to promote the program services; make presentations to groups and clients; develop budgets and oversee administration of program budget components; identify funding sources and work with accounting personnel to ensure that accounts follow funding source regulations and requirements; make financial projections which may combine funding from different sources; prepare and negotiate contracts for the delivery of program services, negotiate contracts for services performed for the program by individual consultants; assist in the development and implementation of project or program policy guidelines and procedures; make suggested revisions and implement changes; developments and strategies affecting program objectives and results; prepare specialized reports, surveys and other program descriptive information and materials; monitor program data and information collection methods and techniques, perform related duties as assigned.

Possible Job Titles: Lead Quality Assurance Manager, Software Manager.

Minimum Education: Bachelor's degree in computer science, engineering, mathematics, business, plus 6 years of practical experience, or equivalent.

Commercial Job Title: PROJECT MANAGEMENT AND PLANNING OPERATIONS

Minimum Education and Experience: Bachelor's degree from an accredited college in a related discipline, or equivalent experience/combined education, with 3 years of professional experience; or 1 year of professional experience with a related Master's degree. Considered experienced, but still a learner.

Job Description: Oversees and manages the operational aspects of ongoing projects and serves as liaison between project management and planning, project team, and line management. Reviews status of projects and budgets; manages schedules and prepares status reports. Assesses project issues and develops resolutions to meet productivity, quality, and client-satisfaction goals and objectives. Develops mechanisms for monitoring project progress and for intervention and problem solving with project managers, line managers, and clients.

Commercial Job Title: QUALITY PROFESSIONAL STAFF JUNIOR

Minimum/General Experience: To be considered for this position, you must minimally meet the knowledge, skills, and abilities listed below:

- Bachelor's Degree or higher in Computer Science, Engineering, Math or related discipline
- Strong analytical and statistical skills
- Familiarity or experience with programming languages (e.g. SAS, PL/SQL, SQL, PL1)
- Ability to use and manipulate data in large scale (e.g. flat files, Access, SQL, Oracle)
- Advanced MS Excel skills
- Proficient in Microsoft Office Suite
- Great written and verbal skills
- Ability to multi task in a deadline driven environment
- Must be a U.S. Citizen to be selected. Applicants selected will be subject to a government security investigation and must meet eligibility requirements.

Functional Responsibilities:

- Design, development and test of object oriented software applications and tools using various languages (e.g. C/C++, Python, MATLAB and Java)
- Generation of applicable documentation
- Participation in peer reviews
- Interfacing with lead engineer, systems engineering, integration and test team and other software engineers
- Support problem resolution and provide improvement recommendations
- Provide direct support to NASIC sensor data characterization efforts via OPIR data collection and analysis.
- Test and implement new OPIR data extraction tools and processes.
- Perform preliminary event analysis on OPIR data ISO NASIC OPIR Event Analysis Teams.
- Research and author Sensor Data Characterization Technical Papers in support of NASIC and the Intelligence Community.
- Travel to Government locations within U.S.
- Additional responsibilities may be assigned commensurate with performance or due to business needs

Example of Duties:

The qualified candidate will work in various technical environments to include large-scale computer platforms, personal computer applications, and the World Wide Web. Most important is the ability to understand data. In this role, the person will work closely with subject matter experts and technical leads to gather and consolidate meta-data throughout the organization. Work will include writing data descriptions and context rules to promote consistent data integrity, and maintain data best practices. The person will create and monitor standard quality reporting and must be able to assess business impact of issues, actively participate in prioritization of issues, and perform tasks to address those issues. The successful candidate will be detail oriented, highly organized, motivated, and a self-starter. In addition to these traits, the candidate must be able to demonstrate excellent written and verbal communication skills, have strong interpersonal skills with a customer orientation, work successfully as part of a diverse team, and have intellectual curiosity about data and its implications. The candidate should have familiarity with Microsoft Office applications including Word, Excel, and PowerPoint. Strong technical skills are necessary (SQL and Access in particular) but can be developed while working on the project if the analyst has other data skills or programming background.

Possible Job Titles: Engineer 1, Systems Analyst 1, Business Data Analyst 1

Commercial Job Title: QUALITY PROFESSIONAL STAFF SENIOR

Minimum/General Experience: To be considered for this position, you must minimally meet the knowledge, skills, and abilities listed below:

- Bachelor's degree or applicable years of experience.
- 10+ years in IT Technology Project Management.
- Experienced Project Manager with an emphasis on Infrastructure and security project delivery in a large enterprise environment
- Provides leadership, management, and oversight of teams that identify, plan, develop, implement, and support the use of technology and/or reengineered processes to improve the value of business unit programs and services.
- Performs risk analysis, Migration plan and financial planning.
- Conducts appropriate product-related training and insures documentation is developed and made available to customers on the use, access, and analysis of technology and systems as the product transitions from program office development to business unit ownership.
- Provides expert advice and consultation to senior management, program owners, and sponsors to assess their needs, provide information or assistance, resolve their problems, and meet their expectations.
- Participates in phase, milestone, and final project reviews; identifies project documentation requirements; and develops and implements product release and testing plans. Plans and participates in change control and configuration management. Prepares and gives presentations or briefings on all aspects of assigned projects or programs.
- Serves as a liaison between Information Technology (IT), customers, stakeholders, and end-users to ensure the program requirements are understood and met and the program execution is consistent with the project plan.

Example of Duties: Ensures that all technology initiatives are supported by business case development, requirements definition, project plans, and return on investment analysis. Manages quality control and risk for assigned projects. Reviews the impact of new technology solutions on existing business processes and recommends areas of improvement. Facilitates discussions on the importance of improving processes prior to implementing technology and ensures that change management support is provided to customers throughout the process. Provides expert advice on project scope, resources, and schedules. Applies best practices and methods to translate business unit objectives into functional requirements. Executes all project management responsibilities. Prepares, executes, and monitors project plans and prepares reports on project performance and earned value.

Possible Job Titles: Project Manager IV, Subject Matter Expert, Systems Analyst 4

Commercial Job Title: SENIOR ENGINEER ANALYST III

Minimum/General Experience: Seven years of increasingly complex and progressive experience in performing systems analysis, development, and implementation for business, mathematical, engineering or scientific settings using a variety of information technology resources. Has experience with current technologies and, where required for the task, emerging technologies. Experience in some of the following or related technical disciplines: data communications, network management, and operational activities of a network; functional requirements analysis; computer security systems; and quality assurance. Progressive experience may include software development, software management, data management, and enterprise-wide strategic systems planning, business information planning and business analysis.

Functional Responsibilities: Formulates and defines system scope and objectives. Prepares detailed specifications for programs. Designs, codes, tests, debugs and documents programs. Works at the highest technical level of all phases of applications, systems analysis and programming activities. Provides guidance and training to less experienced analysts/programmers.

Example of Duties: Contributes to and oversees the development and implementation of systems methods, procedures, and standards necessary to maintain the integrity, reliability, and maintainability of systems. Apply structured methodology to the planning, oversight, and status communication of a project with an understanding of object-oriented technologies for project management. Proficient with the principles of risk assessment and requirements specification. Understanding of requirements from clients and how to identify project risks. Familiarity with techniques used in each stage of development and understanding how decision made at each stage affect the life cycle of the project. Perform quality assurance function. Assists other staff members in the development of project plans, specifications and in the monitoring of progress. Works with minimal management supervision. Applies process improvement and reengineering methodologies and principles to conduct process modernization projects including process and data modeling, developing modern business methods, identifying best practices, and creating and assessing performance measures. Gathers information by developing and implementing data collection instruments and conducts surveys, document reviews and interviews. Provides group facilitation, interviewing, training, and provides additional forms of knowledge transfer. Facilitation support includes cross-functional team building, project scoping work sessions, facilitation using creative dynamics techniques, and conflict resolution techniques. Performs manual or automated modeling of process or data models, data flow diagrams, and simulation models.

Possible Job Titles: Senior Software Engineer, Senior Analyst, Senior Information Systems Engineer.

Minimum Education: An advanced degree preferred or a Bachelor's degree in computer science, engineering, mathematics, or related field, with 5 years of practical experience, or equivalent. Two years of experience can replace one year of education.

Commercial Job Title: SENIOR INFORMATION ARCHITECT

Minimum/General Experience: Has broad, high-level knowledge of applications architectures for Government solutions. Possesses the capability to direct, design, or develop architectures for applications, implementation or software development plans, or integration plans based on different software and web environments. Has the ability to use experience and technical judgment to reach conclusions in the face of limited and/or uncertain data. Able to develop application architecture Requests for Proposals (RFPs) and to evaluate responses to RFPs. Supervises or manages the application architecture and is considered a leading expert in the field. Capable of supervising multiple teams of specialty Engineers working on highly complex software development projects. Plan, organize and administer activities and services; select, train, supervise and evaluate the performance of staff.

Functional Responsibilities:

- ◆ Provides lead analysis for translating customer needs into the design of applications.
- ◆ Provides leadership or direction on innovative research associated with the development of application architectures.
- ◆ Performs management responsibilities for a program or staff for software architecture projects.
- ◆ May perform other duties as required

Example of Duties: Provide architecture for application and systems geared for enterprise deployment. Develop and design enterprise systems management and infrastructure topology for region-wide applications. Evaluate and recommend viable design alternatives, products, and services to existing network and applications configurations and deployment. Assess and provide feedback on complex designs and architectural modules through on-site analysis at different locations, and also through the vendors; devise and implement strategies for potential software and hardware solutions.

Possible Job Titles: Principal Engineer, Senior Communications Engineer, Engineer, Senior Computer Specialist.

Minimum Education: An advanced degree preferred or a Bachelor's degree in computer science, engineering, mathematics, or related field, with 5 years practical experience, or equivalent.

Commercial Job Title: SENIOR NETWORK ENGINEER

Minimum/General Experience: Eight years of experience with at least three years of full time experience in the design, development, integration, implementation and /or maintenance of multi-protocol local and/ or wide area networks, and telecommunications system. Function as technical consultant to the business units.

Functional Responsibility: Management level personnel provide general direction. Responsibilities include functional or technical supervision of lower level professional, technical or clerical positions. Positions in this class are distinguished from other related classes in that they require specialized subject matter expertise in the design/operation of network systems including LANs and WANs; knowledge is applied to research and evaluation involving innovative solutions and alternatives. Positions in this class are distinguished from those in the Network Engineer class by: the advance level of technical expertise, experience and ability to evaluate solutions for networking requirements; making recommendations which have significant impact or consequences including the development of new policies, procedures and service.

Examples of Duties: Identifies, isolates, trouble-shoots and resolves operational problems related to local and wide area network systems (LAN/WAN); tests hardware and transmission media; communicates with users regarding network failures and malfunctions; determines whether problems are due to hardware, software, cabling system, or operator error; operates a variety of diagnostic and test equipment; provides technical expertise to personnel, administrators, and users concerning LAN/WAN concepts, operations and problems including a variety of platforms; communicates with internal staff regarding equipment, circuit failures, parts and network operations; researches and analyzes problems and equipment; answers calls for installations of printers, software; responds to Help Desk tickets and call tickets; utilizes portable test equipment to identify and resolve problems on-site; maintains records related to network installation and trouble calls; confers with users regarding basic and prospective needs for network requirements and services; assists other technical support staff and engineers to assure optimum system availability; follows department established standards to ensure network system security; monitors systems to support and control network traffic; follows back-up, restart and recovery procedures for network applications; reads literature, attends classes, confers with colleagues, etc. to maintain and develop knowledge of industry trends, innovations, new designs; evaluates security needs in order to establish system configurations and operating procedures; evaluates and recommends network methods, upgrades, components and applications for a wide variety of systems to achieve optimal efficiency; consults with technical and managerial personnel to recommend solutions to identified problems affecting network applications and systems; conducts on-site surveys to analyze and recommend network plans; formulates operational designs of a creative and innovative nature for the development and maintenance of LANs and WANs including connections to a large mainframes; prepares technical specifications to be used in requests for proposals or quotations for hardware and software applications; develops procedures manuals, updating operational procedures and notification/training of users relevant to LANs/WANs; evaluates and recommends viable system alternatives, products, and services to existing network configurations; trains employees on systems and procedures, sets priorities, reviews their work and provides input on evaluations; resolves difficult or complex network problems through on-site analysis at different locations, , and also through the vendors; devises and implements strategies for connection of independent networks.

Possible Job Titles: Principal Engineer, Senior Communications Engineer, Senior LAN Engineer, Senior Computer Specialist, Senior Training Specialist.

Minimum Education: An advanced degree preferred or a Bachelor's degree in computer science, engineering, mathematics, or related field, with 3 years of practical experience, or equivalent.

Commercial Job Title: SENIOR SOFTWARE ENGINEER

Minimum/General Experience: Ten or more years of progressive, directly related experience that includes the design, development and implementation of business computer systems and programs, at least four of the required years should have been in a supervisory capacity.

Functional Responsibility: Requires specialized subject matter expertise in the principles and techniques of systems design, programming, and project management as well as extensive, directly related and progressive experience. Knowledge is applied to research and evaluation involving innovative solutions and alternatives. Make decisions of critical consequence impacting administration and management of major, broad organizational services and long range goals. Has first level supervisory responsibility for managing several project teams/units with subordinate professional supervisors. Most frequently meets with administrators, directors and administrative staff or functional and programmatic subject area specialist to plan and direct activities, implement decisions, justify or defend decisions and negotiate or settle significant and/or controversial issues.

Example of Duties: Analyze and evaluate information processing problems, plans, procedures and requirements of organizations. Formulate and express ideas on difficult and complex concepts in a clear and effectively presented manner, both orally and in writing. Prepare work plans, and time and cost estimates for projects and proposed systems. Direct and coordinate assigned project teams through subordinate supervisors. Read, interpret, and apply the information contained in complex technical publications, manuals, and other documents. Apply new developments in the field of data processing and related equipment and technology. Plan, prepare and conduct training classes for data processing personnel. Develop long- and short-range plans for systems development and the utilization of resources.

Possible Job Titles: Senior Programmer, Senior Systems Analyst, Senior Technical Advisor, Senior Programmer/Analyst, Senior Systems Developer, Senior Web Developer, Senior Project Manager.

Minimum Education: Advanced degree in related subject area or Bachelor's degree and six years of practical experience or equivalent.

Commercial Job Title: SENIOR TECHNICAL ENGINEER**Minimum Education and Experience:**

- ✦ Significant prior experience (6+ years) installing, administering and maintaining computer systems and applications in an enterprise IT environment
- ✦ 2 years of Business intelligence background (Reporting, ETL and/or OLAP)
- ✦ Experience with security systems and LDAP
- ✦ B.A. or B.S. Degree from an accredited university (may substitute an Associate's degree plus 4 additional years of experience)
- ✦ Professional experience in maintaining, developing, or troubleshooting data-driven enterprise applications connected to databases, XML sources, web services, flat file, and big data driven backend system.
- ✦ Hands-on experience across the following core technologies including:
 - ✦ Web development tools like Java, JSP, XML, HTML, JDBC/JNDI, and others
 - ✦ Operating Systems like Linux, Windows, Solaris, and others
 - ✦ Application servers like Tomcat, JBoss, Websphere, Weblogic and others
 - ✦ Databases like Oracle, MySQL, SQLServer, BigData, and others
 - ✦ Client-side technologies like javascript
 - ✦ Excellent analytical, debugging and problem-solving skills
 - ✦ Ability to systematically assess and accurately diagnose software-related problems (both individually and within a team setting)

Functional Responsibility:

- ✦ Provide general product support for installation, configuration, and implementation of My Client's Software Suite in a timely manner with a high level of communication and appropriate establishment of expectations.
- ✦ Document defects and enhancement requests for the customer
- ✦ Communicating effectively with the Engineering and Product Management teams to test, reproduce, resolve and document support cases as an advocate for the customer
- ✦ Maintaining an accurate and complete description of cases managed through My Client's case tracking and problem management system.
- ✦ Contributing knowledge on a regular basis to the company Knowledge Base, FAQs, examples and how-to's for publication for customers and the company knowledge system.
- ✦ Mentor and support Junior Support Engineers on assigned topics and cases

Example of Duties:

- ✦ Provide general product support for installation, configuration, and implementation of My Client's Software Suite in a timely manner with a high level of communication and appropriate establishment of expectations.
- ✦ Document defects and enhancement requests for the customer
- ✦ Communicating effectively with the Engineering and Product Management teams to test, reproduce, resolve and document support cases as an advocate for the customer
- ✦ Maintaining an accurate and complete description of cases managed through My Client's case tracking and problem management system.
- ✦ Contributing knowledge on a regular basis to the company Knowledge Base, FAQs, examples and how-to's for publication for customers and the company knowledge system.
- ✦ Mentor and support Junior Support Engineers on assigned topics and cases

Commercial Job Title: SYSTEMS ADMINISTRATOR ASSOCIATE

Minimum/General Experience: desire to work with system service applications and functions, in a large multi-faceted system domain.

Functional Responsibility: Interface between system software and other systems used; spreadsheet, database and word processing applications; hardware operating systems, computer hardware, mainframe access basics, and networks. Knowledge is applied to system administration and support activities.

Example of Duties:

- ♦ Assist in the establishment of network procedures regarding access methods and time, security validation checks, and documentation
- ♦ Maintain network software and hardware inventories
- ♦ Research software and hardware issues regarding the network
- ♦ Inform users when there are network problems
- ♦ Monitor and maintain continuity with software licensing and maintenance agreements
- ♦ Troubleshoot network problems
- ♦ Report to a PC Support Manager or Senior Network Administrator

Minimum Education: Pursuing a bachelor's degree with major coursework in microcomputer software applications and/or computer science, business administration or a closely related field.

Commercial Job Title: SYSTEMS ADMINISTRATOR

Minimum/General Experience: Four or more years of directly related experience involving system service applications and functions, in a large multi-faceted system domain.

Functional Responsibility: Requires specialized subject matter expertise in one or more computer systems utilized for business applications; interface between system software and other systems used; spreadsheet, database and word processing applications; hardware operating systems, computer hardware, mainframe access basics, and networks. Knowledge is applied to system administration and support activities. The Systems Administrator is distinguished from the Principal Systems Analyst class which performs duties independently and requires a greater degree of knowledge and experience, and the Principal Systems Specialist which receives closer supervision and has less responsibility for system administration.

Example of Duties: Maintains system availability to users through daily monitoring; provides technical, functional and operational support to users in the implementation and use of software applications; provide application guidance, parameters and specifications to consultants in developing customized reports necessary to meet business needs including identifying data sources and structures; develops and provides set-up specifications and parameters in the development of interfaces and other automated processes; develops specifications for system modifications, corrections and testing of these system changes prior to implementation; coordinates the installation of new modules, tools, etc.; provides training to new users as well as follow-up training and assistance; confers with users regarding current and prospective system changes and future needs; plans, organizes, controls, and maintains the scheduling of reports, interfaces, project logs and records, problem logs, and progress of projects in relations to established time schedules and work outlines; attends and conducts system planning, status, and functional meetings; writes SQL programs to extract data for ad hoc and scheduled reports; serves as technical liaison with outside consultants and technical support staff; performs system and database administration including backup and restore procedures; analyzes and corrects database growth and performance issues; works with NOS to complete required tasks for maintaining related computer hardware and software; provides security administration in adding and removing users, resolving access problems and determining level of system access; performs related duties as assigned.

Possible Job Title: Quality Assurance Specialist, Test Specialist, Computer Specialist, LAN Specialist, and Administrative Specialist.

Minimum Education: A Bachelor's degree with major coursework in microcomputer software applications and/or computer science, business administration or a closely related field.

Commercial Job Title: SYSTEMS ENGINEER STAFF

Minimum Education and Experience: Bachelor's degree from an accredited college in a related discipline, or equivalent experience/combined education, with 5 years of professional experience; or 3 years of professional experience with a related Master's degree. Considered career, or journey level.

Job Description: Performs technical planning, system integration, verification and validation, cost and risk, and supportability and effectiveness analyses for total systems. Analyses are performed at all levels of total system product to include: concept, design, fabrication, test, installation, operation, maintenance and disposal. Ensures the logical and systematic conversion of customer or product requirements into total systems solutions that acknowledge technical, schedule, and cost constraints. Performs functional analysis, timeline analysis, detail trade studies, requirements allocation and interface definition studies to translate customer requirements into hardware and software specifications. For positions that perform IT responsibilities, use E646, Systems Engr-IT.

Commercial Job Title: SYSTEMS ENGINEER

Minimum Education and Experience: Bachelor's degree from an accredited college in a related discipline, or equivalent experience/combined education, with 9 years of professional experience; or 7 years of professional experience with a related Master's degree. Considered an emerging authority.

Job Description: Performs technical planning, system integration, verification and validation, cost and risk, and supportability and effectiveness analyses for total systems. Analyses are performed at all levels of total system product to include: concept, design, fabrication, test, installation, operation, maintenance and disposal. Ensures the logical and systematic conversion of customer or product requirements into total systems solutions that acknowledge technical, schedule, and cost constraints. Performs functional analysis, timeline analysis, detail trade studies, requirements allocation and interface definition studies to translate customer requirements into hardware and software specifications. For positions that perform IT responsibilities, use E646, Systems Engr-IT.

Commercial Job Title: SYSTEMS ENGINEER IT SENIOR STAFF

Minimum Education and Experience: Bachelor's degree from an accredited college in a related discipline, or equivalent experience/combined education, with 14 years or more of professional experience; or 12 years of professional experience with a related Master's degree. Considered an expert, authority in discipline.

Job Description: Performs technical planning, system integration, verification and validation, cost and risk, and supportability and effectiveness analyses for total systems. Analyses are performed at all levels of total system product to include: concept, design, fabrication, test, installation, operation, maintenance and disposal. Ensures the logical and systematic conversion of customer or product requirements into total systems solutions that acknowledge technical, schedule, and cost constraints. Performs functional analysis, timeline analysis, detail trade studies, requirements allocation and interface definition studies to translate customer requirements into hardware and software specifications. For positions that perform IT responsibilities, use E646, Systems Engr-IT.

Commercial Job Title: SYSTEMS SOFTWARE ANALYST LEVEL I

Minimum/General Experience: Four years of directly related experience in the design, development and implementation of systems software and/or business application systems for computer system using advanced programming languages.

Functional Responsibility: Requires specialized subject matter expertise in operating systems and related system software for computers in a large multi-user environment; The characteristics, capabilities, and uses of operating system components and related vendor supplies and software packages; Software systems including coding and assembly level, procedural and non-procedural, and job control languages; Operating systems and database systems, and teleprocessing systems; As well as extensive directly related and progressive experience; Knowledge is applied to research and evaluation significant impact or consequence involving highly specialized and technical areas impacting recommendations and development of new policies, procedures and services.

Example of Duties: Duties may include, but are not limited to the following: Design, code, implement, maintain, and evaluate computer operating software; Analyze existing hardware products and related commercial software packages to determine the feasibility of using existing products in place of developing new software in-house; Prepare technical specifications to be used in requests for proposals or quotations; Evaluate the impact of new applicants to determine their impact on existing operations and system software and system performance; Consult with technical and managerial personnel, and recommend solutions to identify problems affecting operating systems performance; Recommend technical standards and policies; Perform operating system generations; Analyze and coordinate with vendors for new versions of operating systems; Develop and implement procedures for back-up, restart, and recovery of all software components and major files; Coordinate with technical personnel of vendors for troubleshooting, maintaining, and implementing new software and hardware components to operating systems; Analyze computer performance statistics and make changes to the appropriate software components to attain maximum system performance; Coordinate with and assist staff members in implementing, maintaining, and troubleshooting teleprocessing, database, and other system software; Prepare and conduct training sessions for operations and programming personnel regarding programming and operation techniques and software concepts; Coordinate with application systems and programming personnel, and assist and advise them in the diagnosis and correction of software and hardware problems associated with application programs; May develop, program, and implement data center support systems; perform related duties as assigned.

Possible Job Titles: Web Developer, Graphic Designer, Multimedia Designer, Webmaster, Document Imaging/Management programmer, Database Administrator, Help-Desk Manager, Senior Test Specialist, Tester, LAN/WAN Specialist, Documentation Specialist and Scriptor.

Minimum Education: A Bachelor's degree with major coursework in computer science, engineering, mathematics, or equivalent.

Commercial Job Title: SYSTEMS SOFTWARE ANALYST LEVEL II

Minimum/General Experience: Five years of experience in the design, development and implementation of systems software and/or business application systems for computer system using advanced programming languages.

Functional Responsibility: Requires specialized subject matter expertise in operating systems and related system software for computers in a large multi-user environment; The characteristics, capabilities, and uses of operating system components and related vendor supplies and software packages; Software systems including coding and assembly level, procedural and non-procedural, and job control languages; Operating systems and database systems, and teleprocessing systems; As well as extensive directly related and progressive experience; Knowledge is applied to research and evaluation significant impact or consequence involving highly specialized and technical areas impacting recommendations and development of new policies, procedures and services; Most frequently meets with administrative staff.

Example of Duties: Duties may include, but are not limited to the following: Design, code, implement, maintain, and evaluate computer operating software; Analyze existing hardware products and related commercial software packages to determine the feasibility of using existing products in place of developing new software in-house; Prepare technical specifications to be used in requests for proposals or quotations; Evaluate the impact of new applicants to determine their impact on existing operations and system software and system performance; Consult with technical and managerial personnel, and recommend solutions to identify problems affecting operating systems performance; Recommend technical standards and policies; Perform operating system generations; Analyze and coordinate with vendors for new versions of operating systems; Develop and implement procedures for back-up, restart, and recovery of all software components and major files; Coordinate with technical personnel of vendors for troubleshooting, maintaining, and implementing new software and hardware components to operating systems; Analyze computer performance statistics and make changes to the appropriate software components to attain maximum system performance; Coordinate with and assist staff members in implementing, maintaining, and troubleshooting teleprocessing, database, and other system software; Prepare and conduct training sessions for operations and programming personnel regarding programming and operation techniques and software concepts; Coordinate with application systems and programming personnel, and assist and advise them in the diagnosis and correction of software and hardware problems associated with application programs; May develop, program, and implement data center support systems; perform related duties as assigned.

Possible Job Titles: Web Developer, Sr. Graphic Designer, Multimedia Designer, Document Imaging/Management programmer, Database Administrator, Help-Desk Manager, Senior Test Specialist, LAN/WAN Specialist, Documentation Specialist, Webmaster and Scriptor, CAD Operator, Senior Customer Support Specialist.

Minimum Education: A Bachelor's degree with major coursework in computer science, engineering, mathematics, or related field, with 1-year practical experience, or equivalent.

Commercial Job Title: SYSTEMS SOFTWARE ANALYST LEVEL III / MULTIMEDIA SPECIALIST LEVEL II

Minimum/General Experience: Six years of directly related experience in the design, development and implementation of systems software and/or business application systems for computer system using advanced programming languages.

Functional Responsibility: Requires specialized subject matter expertise in operating systems and related system software for computers in a large multi-user environment; The characteristics, capabilities, and uses of operating system components and related vendor supplies and software packages; Software systems including coding and assembly level, procedural and nonprocedural, and job control languages; Operating systems and database systems, and teleprocessing systems; As well as extensive directly related and progressive experience; Knowledge is applied to research and evaluation significant impact or consequence involving highly specialized and technical areas impacting recommendations and development of new policies, procedures and services; Has functional or technical supervision over lower level positions of Systems Software Analyst I & II; Most frequently meets with administrative, management, and professional staff, as well as functional and/or programmatic subject matter specialists to influence, motivate and to act as a liaison for a program or department.

Example of Duties: Duties may include, but are not limited to the following: Design, code, implement, maintain, and evaluate computer operating software; Analyze existing hardware products and related commercial software packages to determine the feasibility of using existing products in place of developing new software in-house; Prepare technical specifications to be used in requests for proposals or quotations; Evaluate the impact of new applicants to determine their impact on existing operations and system software and system performance; Consult with technical and managerial personnel, and recommend solutions to identify problems affecting operating systems performance; Recommend technical standards and policies; Perform operating system generations; Analyze and coordinate with vendors for new versions of operating systems; Develop and implement procedures for back-up, restart, and recovery of all software components and major files; Coordinate with technical personnel of vendors for troubleshooting, maintaining, and implementing new software and hardware components to operating systems; Analyze computer performance statistics and make changes to the appropriate software components to attain maximum system performance; Coordinate with and assist staff members in implementing, maintaining, and troubleshooting teleprocessing, database, and other system software; Prepare and conduct training sessions for operations and programming personnel regarding programming and operation techniques and software concepts; Coordinate with application systems and programming personnel, and assist and advise them in the diagnosis and correction of software and hardware problems associated with application programs; May develop, program, and implement data center support systems; perform related duties as assigned.

Possible Job Titles: Web Developer, Sr. Graphic Designer, Multimedia Designer/Specialist, Document Imaging/Management programmer, Database Administrator, Help-Desk Manager, Senior Test Specialist, LAN/WAN Specialist, Documentation Specialist and Scriptor.

Minimum Education: A Bachelor's degree with major coursework in computer science, engineering, mathematics, or related field, with 2 years of practical experience, or equivalent.

Commercial Job Title: SYSTEMS SOFTWARE ANALYST LEVEL IV

Minimum/General Experience: Eight years of directly related experience in the design, development and implementation of systems software and/or business application systems for computer system using advanced programming languages.

Functional Responsibility: Requires specialized subject matter expertise in operating systems and related system software for computers in a large multi-user environment; The characteristics, capabilities, and uses of operating system components and related vendor supplies and software packages; Software systems including coding and assembly level, procedural and nonprocedural, and job control languages; Operating systems and database systems, and teleprocessing systems; As well as extensive directly related and progressive experience; Knowledge is applied to research and evaluation significant impact or consequence involving highly specialized and technical areas impacting recommendations and development of new policies, procedures and services; Has functional or technical supervision over lower level positions of Systems Software Analyst I,II & III; Most frequently meets with administrative, management, and professional staff, as well as functional and/or programmatic subject matter specialists to influence, motivate and to act as a liaison for a program or department.

Example of Duties: Duties may include, but are not limited to the following: Design, code, implement, maintain, and evaluate computer operating software; Analyze existing hardware products and related commercial software packages to determine the feasibility of using existing products in place of developing new software in-house; Prepare technical specifications to be used in requests for proposals or quotations; Evaluate the impact of new applicants to determine their impact on existing operations and system software and system performance; Consult with technical and managerial personnel, and recommend solutions to identify problems affecting operating systems performance; Recommend technical standards and policies; Perform operating system generations; Analyze and coordinate with vendors for new versions of operating systems; Develop and implement procedures for back-up, restart, and recovery of all software components and major files; Coordinate with technical personnel of vendors for troubleshooting, maintaining, and implementing new software and hardware components to operating systems; Analyze computer performance statistics and make changes to the appropriate software components to attain maximum system performance; Coordinate with and assist staff members in implementing, maintaining, and troubleshooting teleprocessing, database, and other system software; Prepare and conduct training sessions for operations and programming personnel regarding programming and operation techniques and software concepts; Coordinate with application systems and programming personnel, and assist and advise them in the diagnosis and correction of software and hardware problems associated with application programs; May develop, program, and implement data center support systems; perform related duties as assigned.

Possible Job Titles: Web Developer, Sr. Graphic Designer, Multimedia Designer/Specialist, Document Imaging/Management programmer, Database Administrator, Help-Desk Manager, Senior Test Specialist, LAN/WAN Specialist, Documentation Specialist

Minimum Education: A Bachelor's degree with major coursework in computer science, engineering, mathematics, or related field, with 4 years of practical experience, or equivalent.

Commercial Job Title: SYSTEMS SOFTWARE ANALYST LEVEL V / PRINCIPAL TECHNICAL ADVISOR

Minimum/General Experience: Ten years of directly related experience in the design, development and implementation of systems software and/or business application systems for computer system using advanced programming languages.

Functional Responsibility: Requires specialized subject matter expertise in operating systems and related system software for computers in a large multi-user environment; The characteristics, capabilities, and uses of operating system components and related vendor supplies and software packages; Software systems including coding and assembly level, procedural and nonprocedural, and job control languages; Operating systems and database systems, and teleprocessing systems; As well as extensive directly related and progressive experience; Knowledge is applied to research and evaluation significant impact or consequence involving highly specialized and technical areas impacting recommendations and development of new policies, procedures and services; Has functional or technical supervision over lower level positions of Systems Software Analyst I, II, III & IV; Most frequently meets with administrative, management, and professional staff, as well as functional and/or programmatic subject matter specialists to influence, motivate and to act as a liaison for a program or department.

Example of Duties: Duties may include, but are not limited to the following: Design, code, implement, maintain, and evaluate computer operating software; Analyze existing hardware products and related commercial software packages to determine the feasibility of using existing products in place of developing new software in-house; Prepare technical specifications to be used in requests for proposals or quotations; Evaluate the impact of new applicants to determine their impact on existing operations and system software and system performance; Consult with technical and managerial personnel, and recommend solutions to identify problems affecting operating systems performance; Recommend technical standards and policies; Perform operating system generations; Analyze and coordinate with vendors for new versions of operating systems; Develop and implement procedures for back-up, restart, and recovery of all software components and major files; Coordinate with technical personnel of vendors for troubleshooting, maintaining, and implementing new software and hardware components to operating systems; Analyze computer performance statistics and make changes to the appropriate software components to attain maximum system performance; Coordinate with and assist staff members in implementing, maintaining, and troubleshooting teleprocessing, database, and other system software; Prepare and conduct training sessions for operations and programming personnel regarding programming and operation techniques and software concepts; Coordinate with application systems and programming personnel, and assist and advise them in the diagnosis and correction of software and hardware problems associated with application programs; May develop, program, and implement data center support systems; perform related duties as assigned.

Possible Job Titles: Web Developer, Sr. Graphic Designer, Multimedia Designer/Specialist, Document Imaging/Management programmer, Database Administrator, Help-Desk Manager, Principal Technical Advisor, Senior Test Specialist, LAN/WAN Specialist, Documentation Specialist.

Minimum Education: A Bachelor's degree with major coursework in computer science, engineering, mathematics, or related field, with 6 years of practical experience, or equivalent.

Commercial Job Title: TECHNICAL WRITER

Minimum/General Experience: Assists in collecting and organizing information required for preparation of user's manuals, training materials, installation guides, proposals, reports, and other systems/applications documentations.

Functional Responsibilities: Develop, write, edits functional descriptions, system specifications, user's manuals, special reports, or any other customer deliverables and documents.

Example of Duties: Writes, in clear and concise language, such technical documents as procedure manuals, service manuals, and related technical publications concerned with installation, operation, and maintenance of information technology systems and other related network, software and hardware equipment. Includes writing such technical documentation as operational specifications, bulletins, articles, service manuals, and marketing publications. Acquires or verifies knowledge of subject by interviewing workers engaged in developing new products and services or in making improvements, observing performance of experiments and methods of production, referring to specification and design proto-types, engineering drawings and notes, trade and engineering journals, rewrites of articles, bulletins, manuals, or similar publications.

Possible Job Titles: Technical Documentation Specialist.

Minimum Education: An advanced degree preferred or a Bachelor's degree in computer science, engineering, mathematics, or related field, with 5 years of practical experience, or equivalent.