FSC GROUP Class 70, STANDARD INDUSTRY GROUP: 70

FSC Product code: D399

Contract number: GS-35F-412CA

For more information on ordering from Federal Supply Schedules click on the FSS Schedules button at fss.gsa.gov.

Contract period: July 8, 2015 to July 7, 2020

3G FEDERAL SOLUTIONS LLC
312 E. Market St., Suite F
Leesburg, VA 20176
DUNS: 030794930 CAGE Code: 6KMS0
Voice: 703-596-2492 Fax#: 866-884-2291
Contact: Arya Salahi Email: arya.salahi@3gfederal.net

Contractor’s internet address/web site where schedule information can be found: www.3gfederal.net

Business size: Small

1a Table of awarded special item number(s) with appropriate cross-reference to item descriptions and awarded price(s).

SIN 132-51

<table>
<thead>
<tr>
<th>SIN</th>
<th>LABOR CATEGORY</th>
<th>RATE OFFERED TO GSA</th>
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<td>Cloud &amp; Network Subject Matter Expert (CSME)</td>
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1b N/A.

1c

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: Bachelor Degree or greater required plus 2 years practical experience.

Commercial Job Title: Network Engineer Level III

Minimum/General Experience: Ten years 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. Act 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 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; utilizes portable test equipment to identify and resolve problems on-site; maintains records related to
network installation and trouble calls; 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, Special Applications System 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 four years 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; 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: System Administrator, Help-Desk Manager, Senior Test Specialist, LAN/WAN Specialist, Configuration management Specialist

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

Commercial Job Title: Network Engineer Level IV
Minimum/General Experience: Eight years 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 Viruscan. 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 practical experience.

Commercial Job Title: Infrastructure Architect

Minimum/General Experience: Ten years 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: Designs and manages IT solutions and architectures to support current requirements and future cross-functional requirements and interfaces. Scopes, designs, develops, installs, and maintains enterprise-wide or large-scale information systems. Ensures systems are compatible and in compliance with application standards such as NIST, IEEE reference models, open systems architecture standards, and that the common operating environment is architecturally compliant. Analyzes, defines, and provides solutions for resolving issues that exist in data center disciplines.

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 management tools. 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 practical experience, or equivalent.

Commercial Job Title: Systems Software Analyst Level V/Principal Technical Advisor
Minimum/General Experience: Twelve 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 practical experience, or equivalent.

Commercial Job Title: Information Architect

Minimum/General Experience: Ten years of directly related 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 network 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 network and application 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 practical experience, or equivalent.

Commercial Job Title: Senior Software Engineer

Minimum/General Experience: Twelve 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. 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. Develop long- and short-range plans for systems development and the utilization of resources.

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

Minimum Education: Advanced degree in related subject area or Bachelor’s degree and eight years practical experience or equivalent.

Commercial Job Title: Senior Information Architect

Minimum/General Experience: Twelve years of directly related 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: Technical Expert

Minimum/General Experience: 14 years in systems development.

Functional Responsibilities:

Contributes to 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.

Possible Job Titles: Functional Expert, 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. Each post-graduate degree equivalent to up to three years experience (post-graduate study may be substituted for experience at the rate of three credit hours of study for three months of experience, up to 36 credit hours). Certifications such as CCIE and/or JCIE.

Commercial Job Title: Cloud & Network Architect

Minimum/General Experience: 6 years’ 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 Cloud networks, and telecommunications system. 6 years’ design & implementation experience with distributed applications. Working knowledge of software development tools and methodologies

Functional Responsibility: Requires customer facing skills to represent AWS well within the customer’s environment and drive discussions with senior personnel regarding trade-offs, best practices, project management and risk mitigation. Demonstrated ability to think strategically about business, product, and technical challenges. Deep hands-on experience leading the design, development and deployment of business software at scale or current hands on technology infrastructure, network, compute, storage, and virtualization experience. Proven experience with software development life cycle (SDLC) and agile/iterative methodologies required. Integration of AWS cloud services with on-premise technologies from Microsoft, IBM, Oracle, HP, SAP etc. Experience with IT compliance and risk management requirements (eg. security, privacy, SOX, HIPAA etc.)

Example of Duties: Duties may include, but are not limited to the following: Design, code, implement and maintain the primary AWS services (EC2, ELB, RDS, Route53 & S3). Strong track record of implementing AWS services in a variety of distributed computing environment. Leading highly-available and fault-tolerant enterprise and web-scale software deployments. Infrastructure automation through DevOps scripting (E.g. shell, Python, Ruby, Powershell).. Configuration management using CloudFormation, Chef & Puppet.. Strong practical Linux and Windows-based systems administration skills in a Cloud or Virtualized environment. Experience managing data center operations, including data assurance, monitoring, alerting and notifications. 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: System Administrator, Help-Desk Manager, Senior Test Specialist, LAN/WAN Specialist, Configuration management Specialist

Minimum Education: A Bachelor's degree with major coursework in computer science, engineering, mathematics, or related field, with 6 years practical experience, or equivalent.
Commercial Job Title: Cloud Solutions Architect

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

Functional Responsibility:

Technical liaison between customers, service engineering & support teams. Directly collaborate with the sales team to formulate and execute a sales strategy to exceed revenue objectives through the adoption of AWS. Be an AWS evangelist. Educate customers of all sizes on the value proposition of AWS. Establish credibility & build deep relationships with senior technical individuals within customers to enable them to be cloud advocates. Participate in deep architectural discussions to build confidence and ensure customer success when building new and migrating existing applications, software and services on the AWS platform. 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: Conduct deep-dive “hands-on” education/training sessions to transfer knowledge to customers considering, or already using, AWS. Capture and share best-practice knowledge amongst the AWS SA community. Author or contribute to AWS customer-facing publications such as whitepapers, tutorials, etc. Present sessions at AWS and industry conferences. 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 Cloud network 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; utilizes portable test equipment to identify and resolve problems on-site; maintains records related to network installation and trouble calls; 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 Cloud; 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, Special Applications System 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 8 years practical experience, or equivalent.

Commercial Job Title: Cloud Database Architect

Minimum/General Experience: Eight years experience with at least four years of full time experience in-

- Collaboration with AWS field sales, pre-sales, training and support teams to help partners and customers learn and use AWS services such as Amazon Elastic Compute Cloud (EC2), Amazon Data Pipeline, S3, DynamoDB NoSQL, Relational Database Service (RDS), Elastic Map Reduce (EMR) and Amazon Redshift.
- Deliver on-site technical engagements with partners and customers. This includes participating in pre-sales on-site visits, understanding customer requirements, creating consulting proposals and creating packaged Big Data service offerings.

- Delivery - Engagements include short on-site projects proving the use of AWS services to support new distributed computing solutions that often span private cloud and public cloud services. Engagements will include migration of existing applications and development of new applications using AWS cloud services.

Functional Responsibility:

Hands on experience leading large-scale global data warehousing and analytics projects. Demonstrated industry leadership in the fields of database, data warehousing or data sciences. Understand high availability concepts. Understands server tuning concepts (parameters, resources, contention, etc). Backup / restore/ Disaster Recovery experience. Experience with AWS EC2, monitoring and optimization. Experience with data warehousing concepts and techniques including extensive knowledge and use of star schema. Full understanding of Redshift or Columnar DB architecture. At least 1 year experience in managing a Vertica/Greenplum/Paracel cluster. Experience in optimization techniques such as projections and partitioning. Able to write, tune SQL queries. Understand column store databases.

Examples of Duties: Scripting language (bash, perl, python). Proven ability in managing databases of 1-10TB in size (Vertica, Greenplum, Netezza, AsterData, Paracel, Exadata). Understanding of OLTP vs OLAP data administration needs. Experience in ETL/ELT workflow management. Understanding and ability to participate in all phases of the SDLC including requirements gathering, business analysis, configuration management and quality control. Experience implementing data transformation and processing solutions using Apache PIG. Experience designing data queries against data in the HDFS environment using tools such as Apache Hive/Impala/Shark.

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 8 years practical experience.

Commercial Job Title: Cloud & Network Subject Matter Expert

Minimum/General Experience: Eight years experience with at least five years of full time experience in the design, development, integration, implementation of Cloud Solution Offerings and participate as a Solution Lead for Cloud Proposals and Opportunities. Function as technical consultant to the business units.

Functional Responsibility: Provide strong understanding of AWS capabilities and limitations. Designs and manages IT solutions and architectures to support current requirements and future cross-functional requirements and interfaces. Scopes, designs, develops, installs, and maintains enterprise-wide or large-scale information systems. Ensures systems are compatible and in compliance with application standards such as NIST, IEEE reference models, open systems architecture standards, and that the common operating environment is architecturally compliant. Analyzes, defines, and provides solutions for resolving issues that exist in data center disciplines. Thorough understanding of Cloud Computing: virtualization technologies, Infrastructure as a Service, Platform as a Service and Software as a Service Cloud delivery models and the current competitive landscape. Thorough understanding of infrastructure (firewalls, load balancers, hypervisor, storage, monitoring, security etc) and have experience with orchestration to develop a cloud solution. Thorough understanding of and/or ability to solution service offerings across all four tiers:

- Infrastructure (including outsourcing best practices, transition, and ITIL)
- Application Development and Maintenance (including a basic understanding of various programming languages, SOA, and CGI’s development centers)
- System Integration and Management (including multiple SDLC methodologies, CMMI, and IEEE);
- Thorough understanding of Government procurement policies and practices

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 management tools. Identify, isolate, trouble-shoots and resolve operational problems related
to Cloud environment. Develop procedure manuals, updating operational procedures and notification/training of users; 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 8 years practical experience, or equivalent.

2. Maximum order. $500,000

3. Minimum order. $100.00

4. Geographic coverage (delivery area). 50 United States; District of Columbia; Puerto Rico

5. Point(s) of production (city, county, and State or foreign country). Not Applicable


7. Quantity discounts. Additional 1% for orders exceeding $250,000.

8. Prompt payment terms. 1/2% 20 days Net 30

9a Government purchase cards are accepted at or below the micro-purchase threshold.

9b Government purchase cards are accepted above the micro-purchase threshold.

10. Foreign items (list items by country of origin). None.

11a Time of delivery. (Contractor insert number of days.) As negotiated with ordering agency.

11b Expedited Delivery. Contact the Contractor.

11c Overnight and 2-day delivery. Contact the Contractor.

11d Urgent Requirements. Contact the Contractor.

12. F.O.B. point(s). Destination.

13a Ordering address. Set forth above.
13b. Ordering procedures: For supplies and services, the ordering procedures, information on Blanket Purchase Agreements (BPA’s) are found in Federal Acquisition Regulation (FAR) 8.405-3.

14. Payment address. Set forth above.

15. Warranty provision. None.

16. Export packing charges, if applicable. Not Applicable

17. Terms and conditions of Government purchase card acceptance (any thresholds above the micro-purchase level). None.

18. Terms and conditions of rental, maintenance, and repair (if applicable). Not Applicable

19. Terms and conditions of installation (if applicable). Not Applicable

20. Terms and conditions of repair parts indicating date of parts price lists and any discounts from list prices (if applicable). Not Applicable

20a. Terms and conditions for any other services (if applicable). Not Applicable

21. List of service and distribution points (if applicable). Not Applicable

22. List of participating dealers (if applicable). Not Applicable

23. Preventive maintenance (if applicable). Not Applicable

24a. Special attributes such as environmental attributes (e.g., recycled content, energy efficiency, and/or reduced pollutants). Not Applicable

24b. If applicable, indicate that Section 508 compliance information is available on Electronic and Information Technology (EIT) supplies and services and show where full details can be found (e.g. contractor’s website or other location.) The EIT standards can be found at: www.Section508.gov/. Not Applicable

25. Data Universal Number System (DUNS) number. Set forth above.

26. Contractor is registered in the SAM database.
1. **SCOPE**
   a. The prices, terms and conditions stated under Special Item Number 132-51 Information Technology Professional Services apply exclusively to IT Professional Services within the scope of this Information Technology Schedule.
   b. The Contractor shall provide services at the Contractor’s facility and/or at the ordering activity location, as agreed to by the Contractor and the ordering activity.

   a. Performance incentives may be agreed upon between the Contractor and the ordering activity on individual fixed price orders or Blanket Purchase Agreements under this contract.
   b. The ordering activity must establish a maximum performance incentive price for these services and/or total solutions on individual orders or Blanket Purchase Agreements.
   c. Incentives should be designed to relate results achieved by the contractor to specified targets. To the maximum extent practicable, ordering activities shall consider establishing incentives where performance is critical to the ordering activity’s mission and incentives are likely to motivate the contractor. Incentives shall be based on objectively measurable tasks.

3. **ORDER**
   a. Agencies may use written orders, EDI orders, blanket purchase agreements, individual purchase orders, or task orders for ordering services under this contract. Blanket Purchase Agreements shall not extend beyond the end of the contract period; all services and delivery shall be made and the contract terms and conditions shall continue in effect until the completion of the order. Orders for tasks which extend beyond the fiscal year for which funds are available shall include FAR 52.232-19 (Deviation – May 2003) Availability of Funds for the Next Fiscal Year. The purchase order shall specify the availability of funds and the period for which funds are available.
   b. All task orders are subject to the terms and conditions of the contract. In the event of conflict between a task order and the contract, the contract will take precedence.

4. **PERFORMANCE OF SERVICES**
   a. The Contractor shall commence performance of services on the date agreed to by the Contractor and the ordering activity.
   b. The Contractor agrees to render services only during normal working hours, unless otherwise agreed to by the Contractor and the ordering activity.
   c. The ordering activity should include the criteria for satisfactory completion for each task in the Statement of Work or Delivery Order. Services shall be completed in a good and workmanlike manner.
d. Any Contractor travel required in the performance of IT Services must comply with the Federal Travel Regulation or Joint Travel Regulations, as applicable, in effect on the date(s) the travel is performed. Established Federal Government per diem rates will apply to all Contractor travel. Contractors cannot use GSA city pair contracts.

5. STOP-WORK ORDER (FAR 52.242-15) (AUG 1989)

(a) The Contracting Officer may, at any time, by written order to the Contractor, require the Contractor to stop all, or any part, of the work called for by this contract for a period of 90 days after the order is delivered to the Contractor, and for any further period to which the parties may agree. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Within a period of 90 days after a stop-work is delivered to the Contractor, or within any extension of that period to which the parties shall have agreed, the Contracting Officer shall either-

   (1) Cancel the stop-work order; or

   (2) Terminate the work covered by the order as provided in the Default, or the Termination for Convenience of the Government, clause of this contract.

(b) If a stop-work order issued under this clause is canceled or the period of the order or any extension thereof expires, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule or contract price, or both, and the contract shall be modified, in writing, accordingly, if-

   (1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and

   (2) The Contractor asserts its right to the adjustment within 30 days after the end of the period of work stoppage; provided, that, if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon the claim submitted at any time before final payment under this contract.

(c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

(d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

6. INSPECTION OF SERVICES

7. **RESPONSIBILITIES OF THE CONTRACTOR**

The Contractor shall comply with all laws, ordinances, and regulations (Federal, State, City, or otherwise) covering work of this character. If the end product of a task order is software, then FAR 52.227-14 (Dec 2007) Rights in Data – General, may apply.

8. **RESPONSIBILITIES OF THE ORDERING ACTIVITY**

Subject to security regulations, the ordering activity shall permit Contractor access to all facilities necessary to perform the requisite IT Professional Services.

9. **INDEPENDENT CONTRACTOR**

All IT Professional Services performed by the Contractor under the terms of this contract shall be as an independent Contractor, and not as an agent or employee of the ordering activity.

10. **ORGANIZATIONAL CONFLICTS OF INTEREST**

a. Definitions.

“Contractor” means the person, firm, unincorporated association, joint venture, partnership, or corporation that is a party to this contract.

“Contractor and its affiliates” and “Contractor or its affiliates” refers to the Contractor, its chief executives, directors, officers, subsidiaries, affiliates, subcontractors at any tier, and consultants and any joint venture involving the Contractor, any entity into or with which the Contractor subsequently merges or affiliates, or any other successor or assignee of the Contractor.

An “Organizational conflict of interest” exists when the nature of the work to be performed under a proposed ordering activity contract, without some restriction on ordering activities by the Contractor and its affiliates, may either (i) result in an unfair competitive advantage to the Contractor or its affiliates or (ii) impair the Contractor’s or its affiliates’ objectivity in performing contract work.

b. To avoid an organizational or financial conflict of interest and to avoid prejudicing the best interests of the ordering activity, ordering activities may place restrictions on the Contractors, its affiliates, chief executives, directors, subsidiaries and subcontractors at any tier when placing orders against schedule contracts. Such restrictions shall be consistent with FAR 9.505 and shall be designed to avoid, neutralize, or mitigate organizational conflicts of interest that might otherwise exist in situations related to individual orders placed against the schedule contract. Examples of situations, which may require restrictions, are provided at FAR 9.508.

11. **INVOICES**

The Contractor, upon completion of the work ordered, shall submit invoices for IT Professional services. Progress payments may be authorized by the ordering activity on individual orders if appropriate. Progress payments shall be based upon completion of defined milestones or interim products. Invoices shall be submitted monthly for recurring services performed during the preceding month.

12. **PAYMENTS**
For firm-fixed price orders the ordering activity shall pay the Contractor, upon submission of proper invoices or vouchers, the prices stipulated in this contract for service rendered and accepted. Progress payments shall be made only when authorized by the order. For time-and-materials orders, the Payments under Time-and-Materials and Labor-Hour Contracts at FAR 52.212-4 (MAR 2009) (ALTERNATE I – OCT 2008) (DEVIATION I – FEB 2007) applies to time-and-materials orders placed under this contract. For labor-hour orders, the Payment under Time-and-Materials and Labor-Hour Contracts at FAR 52.212-4 (MAR 2009) (ALTERNATE I – OCT 2008) (DEVIATION I – FEB 2007) applies to labor-hour orders placed under this contract. 52.216-31(Feb 2007) Time-and-Materials/Labor-Hour Proposal Requirements—Commercial Item Acquisition As prescribed in 16.601(e)(3), insert the following provision:

(a) The Government contemplates award of a Time-and-Materials or Labor-Hour type of contract resulting from this solicitation.
(b) The offeror must specify fixed hourly rates in its offer that include wages, overhead, general and administrative expenses, and profit. The offeror must specify whether the fixed hourly rate for each labor category applies to labor performed by—
   (1) The offeror;
   (2) Subcontractors; and/or
   (3) Divisions, subsidiaries, or affiliates of the offeror under a common control.

13. RESUMES
Resumes shall be provided to the GSA Contracting Officer or the user ordering activity upon request.

14. INCIDENTAL SUPPORT COSTS
Incidental support costs are available outside the scope of this contract. The costs will be negotiated separately with the ordering activity in accordance with the guidelines set forth in the FAR.

15. APPROVAL OF SUBCONTRACTS
The ordering activity may require that the Contractor receive, from the ordering activity's Contracting Officer, written consent before placing any subcontract for furnishing any of the work called for in a task order.

16. DESCRIPTION OF IT PROFESSIONAL SERVICES AND PRICING
The descriptions are set forth above.
1. SCOPE
The prices, terms and conditions stated under Special Item Number 132-52 Electronic Commerce (EC) Services apply exclusively to EC Services within the scope of this Information Technology Schedule.

2. ELECTRONIC COMMERCE CAPACITY AND COVERAGE
The Ordering Activity shall specify the capacity and coverage required as part of the initial requirement.

3. INFORMATION ASSURANCE
   a. The Ordering Activity is responsible for ensuring to the maximum extent practicable that each requirement issued is in compliance with the Federal Information Security Management Act (FISMA)
   b. The Ordering Activity shall assign an impact level (per Federal Information Processing Standards Publication 199 & 200 (FIPS 199, “Standards for Security Categorization of Federal Information and Information Systems”) (FIPS 200, “Minimum Security Requirements for Federal Information and Information Systems”) prior to issuing the initial statement of work. Evaluations shall consider the extent to which each proposed service accommodates the necessary security controls based upon the assigned impact level. The Contractor awarded SIN 132-52 is capable of meeting at least the minimum security requirements assigned against a low-impact information system (per FIPS 200).
   c. The Ordering Activity reserves the right to independently evaluate, audit, and verify the FISMA compliance for any proposed or awarded Electronic Commerce services. All FISMA certification, accreditation, and evaluation activities are the responsibility of the ordering activity.

4. DELIVERY SCHEDULE.
The Ordering Activity shall specify the delivery schedule as part of the initial requirement. The Delivery Schedule options are found in Information for Ordering Activities Applicable to All Special Item Numbers, paragraph 6. Delivery Schedule.

5. INTEROPERABILITY.
When an Ordering Activity requires interoperability, this requirement shall be included as part of the initial requirement. Interfaces may be identified as interoperable on the basis of participation in a sponsored program acceptable to the Ordering Activity. Any such access or interoperability with teleports/gateways and provisioning of enterprise service access will be defined in the individual requirement.

6. ORDER
   a. Agencies may use written orders, EDI orders, blanket purchase agreements, individual purchase orders, or task orders for ordering electronic services under this contract. Blanket Purchase
Agreements shall not extend beyond the end of the contract period; all electronic services and
delivery shall be made and the contract terms and conditions shall continue in effect until the
completion of the order. Orders for tasks which extend beyond the fiscal year for which funds are
available shall include FAR 52.232-19 (Deviation – May 2003) Availability of Funds for the Next
Fiscal Year. The purchase order shall specify the availability of funds and the period for which
funds are available.
b. All task orders are subject to the terms and conditions of the contract. In the event of conflict
between a task order and the contract, the contract will take precedence.

7. PERFORMANCE OF ELECTRONIC SERVICES
The Contractor shall provide electronic services on the date agreed to by the Contractor and the
ordering activity.

8. RESPONSIBILITIES OF THE CONTRACTOR
The Contractor shall comply with all laws, ordinances, and regulations (Federal, State, City, or
otherwise) covering work of this character.

9. RIGHTS IN DATA
The Contractor shall comply FAR 52.227-14 RIGHTS IN DATA – GENERAL and with all laws,
ordinances, and regulations (Federal, State, City, or otherwise) covering work of this character.

10. ACCEPTANCE TESTING
If requested by the ordering activity the Contractor shall provide acceptance test plans and
procedures for ordering activity approval. The Contractor shall perform acceptance testing of the
systems for ordering activity approval in accordance with the approved test procedures.

11. WARRANTY
The Contractor shall provide a warranty covering each Contractor-provided electronic commerce
service. The minimum duration of the warranty shall be the duration of the manufacturer’s
commercial warranty for the item listed below:

**Insert commercial warranty.**

The warranty shall commence upon the later of the following:
a. Activation of the user’s service
b. Installation/delivery of the equipment
The Contractor, by repair or replacement of the defective item, shall complete all warranty services
within five working days of notification of the defect. Warranty service shall be deemed complete
when the user has possession of the repaired or replaced item. If the Contractor renders warranty
service by replacement, the user shall return the defective item(s) to the Contractor as soon as
possible but not later than ten (10) working days after notification.
12. MANAGEMENT AND OPERATIONS PRICING
The Contractor shall provide management and operations pricing on a uniform basis. All management and operations requirements for which pricing elements are not specified shall be provided as part of the basic service.

13. TRAINING
The Contractor shall provide normal commercial installation, operation, maintenance, and engineering interface training on the system. If there is a separate charge, indicate below:

14. MONTHLY REPORTS
In accordance with commercial practices, the Contractor may furnish the ordering activity/user with a monthly summary ordering activity report.

14. ELECTRONIC COMMERCE SERVICE PLAN
(a) Describe the electronic service plan and eligibility requirements. Upon request, the ordering activity can be provided a report outlining current services being provided which will include details of the products and services currently provided, account numbers, compute usage, network usage, database usage, dates of implementations and any additional information upon request.

(b) Describe charges, if any, for additional usage guidelines. All additional usage charges will be negotiated based on the amount of additional usage required and the type of services requested. The additional services will be negotiated on an individual case basis.

(c) Describe corporate volume discounts and eligibility requirements, if any. None are applicable.