

**General Services Administration
Federal Supply Service
Multiple Award Schedule (MAS) Pricelist**

General Purpose Commercial Information Technology Equipment, Software, and Services



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www.devconinc.com
Woman-Owned Small Business (WOSB)
GSA 8(a) STARS II GWAC**

On-line access to contract ordering information, terms and conditions, up-to-date pricing, and the option to create an electronic delivery order are available through GSA Advantage!®, a menu-driven database system. The INTERNET address GSA Advantage!® is: GSAAdvantage.gov.

For more information on ordering from Federal Supply Schedules, visit: <https://www.gsa.gov/technology/technology-purchasing-programs/it-schedule-70>

**Contract Number: GS35F354GA
Contract Period: 04/06/2017 - 04/05/2022
Prices Effective: 04/06/2017 - 04/05/2022
Effective: 03/30/2020**

SIN 518210C - Cloud and Cloud-Related IT Professional Services

SIN 54151S - Information Technology (IT) Professional Services

SIN OLM - Order-Level Materials (OLM)

Development Consultants Incorporated (DCI) provides a full range of IT services including, cloud strategy and migration, DevOps, DevSecOps, and engineering professional services. Our robust portfolio of cloud service offerings includes cloud security compliance, governance, certification, accreditation, and Authorization to Operate (ATO) for national defense, homeland security, criminal justice, intelligence, law enforcement, and civilian information systems. For more information, please visit www.devconinc.com.



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CUSTOMER INFORMATION:

1a. Awarded Special Item Numbers (SINs):

SIN	Description
OLM	Order-Level Materials (OLM)
518210C	Cloud and Cloud-related IT Professional Services
54151S	Information Technology Professional Services

1b. Lowest priced model number and lowest unit price for that model for each SIN: See SIN-specific pricing tables.

SIN	Model & Pricing
OLM	Determined at the delivery/task order level
518210C	See Price List Below
54151S	See Price List Below

1c. Description of all corresponding commercial job titles, experience, functional responsibility, and education: See SIN-specific labor category description.

2. Maximum order: \$500,000 (Maximum order threshold is not the ceiling on order size)

SIN	Amount
OLM	Determined at the delivery/task order level
518210C	\$500,000 per order
54151S	\$500,000 per order

If the best value selection places your order over the Maximum Order identified in this catalog/pricelist, you have an opportunity to obtain a better schedule contract price. Please contact DCI for a better price prior to placing the order. DCI may: 1) Offer a new lower price, 2) Offer the lowest price available under the contract, or 3) Decline the order within five (5) business days. A delivery order may be placed against the Schedule contract even though it exceeds the Maximum Order, in accordance with the Maximum Order provisions contained in the Schedule.

3. Minimum order: \$100.00

4. Geographic coverage (delivery area): The Geographic Scope of Contract will be domestic delivery only.

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

6. Discount from list prices or statement of net price: Prices shown herein are NET Prices, IFF is added.

7. Quantity discounts: Discounts may be negotiated at the delivery/task order level.

8. Prompt payment terms: Net 30 Days*. Prompt payment terms cannot be negotiated out of the contractual agreement in exchange for other concessions.

The Contractor, upon completion of the work ordered, shall submit invoices monthly for recurring services performed during the preceding month. 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.



*For Firm Fixed Price (FFP) 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 (T&M) orders or Labor Hour (LH) orders, the Payments under T&M and LH Contracts at FAR 52.232-7 (DEC 2002), (Alternate II-Feb 2002) (Deviation- May 2003) applies to T&M orders placed under this contract. For LH orders, the Payment under T&M and LH Contracts at FAR 52.232-7 (DEC 2002), (Alternate II-Feb 2002) (Deviation-May 2003)) applies to labor-hour orders placed under this contract.

- 9a. **Government purchase cards are accepted at or below the micro-purchase threshold.**
- 9b. **Government purchase cards are not accepted above the micro-purchase threshold.**
- 10. **Foreign items:** None
- 11a. **Time of delivery:** Specified in negotiated delivery/task orders.
- 11b. **Expedited delivery:** Specified in negotiated delivery/task orders.
- 11c. **Overnight and 2-day delivery:** Not Applicable.
- 11d. **Urgent requirements:** When the Federal Supply Schedule contract delivery period does not meet the bona fide urgent delivery requirements of an ordering agency, agencies are encouraged, if time permits, to contact the Contractor for the purpose of obtaining accelerated delivery. The Contractor shall reply to the inquiry within 3 workdays after receipt. (Telephonic replies shall be confirmed by the Contractor in writing.) If the Contractor offers an accelerated delivery time acceptable to the ordering agency, any order(s) placed pursuant to the agreed upon accelerated delivery time frame shall be delivered within this shorter delivery time and in accordance with all other terms and conditions of the contract.
- 12. **FOB point(s):** Destination
- 13a. **Ordering address:**

Development Consultants, Incorporated
24940 Patrick brush Run Road
Marysville, OH 43040
Phone: (855) 746-5324,,70
Email: orders@devconinc.com
- 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:** Should EFT be unavailable; the remittance address is as follows:

Development Consultants Incorporated
24940 Patrick brush Run Road,
Marysville, OH 43040
Phone: (855) 746-5324
Email: accounting@devconinc.com
- 15. **Warranty provision:** Provision for any appropriate and applicable warranties shall be specifically identified in individual orders.
- 16. **Export packing charges:** Not Applicable



17. **Terms and conditions of Government purchase card acceptance:** Development Consultants Incorporated (DCI) accepts government commercial credit cards in accordance with government commercial credit card program guidelines.
18. **Terms and conditions of rental, maintenance, and repair:** Not Applicable
19. **Terms and conditions of installation:** Not Applicable
20. **Terms and conditions of repair parts indicating date of parts price lists and any discounts from list prices:** Not Applicable
- 20a. **Terms and conditions for any other services:** Not Applicable
21. **List of service and distribution points:** Not Applicable
22. **List of participating dealers:** Not Applicable
23. **Preventive maintenance:** Not Applicable
- 24a. **Special attributes such as environmental attributes (e.g., recycled content, energy efficiency, and/or reduced pollutants):** Not Applicable
- 24b. **Section 508 compliance for Electronic and Information Technology (EIT):**
If applicable, Development Consultants Incorporated (DCI) will comply with all applicable Section 508 requirements as specified for each Task Order placed against this contract vehicle.
The EIT standard can be found at: www.Section508.gov
25. **Data Universal Number System (DUNS) number:** 042292750
26. **Notification regarding registration in System for Award Management (SAM) database:**
Development Consultants Incorporated has an active registration in the System for Award Management (SAM) database.



**TERMS AND CONDITIONS APPLICABLE TO INFORMATION
TECHNOLOGY (IT) PROFESSIONAL SERVICES (SPECIAL ITEM NUMBER
54151S)**

*****NOTE:** *All non-professional labor categories must be incidental to, and used solely to support professional services, and cannot be purchased separately.*

1. SCOPE

- a. The prices, terms and conditions stated under Special Item Number 54151S 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.

2. PERFORMANCE INCENTIVES I-FSS-60 Performance Incentives (April 2000)

- 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

In accordance with 552.212-4 CONTRACT TERMS AND CONDITIONS-COMMERCIAL ITEMS (JAN 2017)

(DEVIATION - FEB 2007) (DEVIATION - FEB 2018) for Firm-Fixed Price orders; or GSAR 552.212-4 CONTRACT TERMS AND CONDITIONS-COMMERCIAL ITEMS (JAN 2017) (DEVIATION - FEB 2018) (ALTERNATE I -JAN 2017) (DEVIATION -FEB 2007) for Time-and-Materials and Labor-Hour Contracts orders placed under this contract.

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

- a. The Contractor shall provide a description of each type of IT Service offered under Special Item Numbers 54151S IT Professional Services should be presented in the same manner as the Contractor sells to its commercial and other ordering activity customers. If the Contractor is proposing hourly rates, a description of all corresponding commercial job titles (labor categories) for those individuals who will perform the service should be provided.
- b. Pricing for all IT Professional Services shall be in accordance with the Contractor's customary commercial practices; e.g., hourly rates, monthly rates, term rates, and/or fixed prices, minimum general experience and minimum education.

54151S PROFESSIONAL SERVICES DESCRIPTION

Development Consultants Incorporated (DCI) is a woman-owned small business with outstanding technical competency and exceptional past performance. We offer the Government a low risk, cost-effective, standard of excellence backed by over two decades of experience. DCI is compliant with National Institute of Standards and Technology (NIST) 800-171, certified compliant with ISO 9001:2015 for Quality Management, ISO 20001:2018 for Service Management, and ISO 27001:2013 for Information Security Management.

Development Consultants Incorporated offers Information Technology expertise, including, but not limited to the following specializations:

Cloud Strategy, Architecture, and Engineering

We design and implement large scale enterprise cloud data centers that comply with the latest NIST, FIPS, OMB, and FedRAMP standards. We provide physical to cloud migration services, as well as hybrid cloud solutions to securely connect our customers to the cloud. We design solutions that scale to meet dynamic capacity requirements including serverless cloud solutions that only incur cost when accessed.

Software Engineering Services

We provide test driven software development to satisfy the most demanding technical requirements with agility and eloquence. Our software processes utilize highly automated continuous integration and delivery that minimize overhead and maximize productivity. We offer a full range of software lifecycle services that encompass everything

from inception to production. Our development services include software design, coding, performance testing, security testing, ongoing maintenance, re-factoring/re-engineering, and comprehensive data migration services.

Performance Engineering

We offer comprehensive performance engineering solutions, including nearly infinitely scalable load testing of application, database, and infrastructure resources. Application optimization includes design analysis, code reviews, code profiling, and code performance/scalability optimization. Our database optimization services include improving the efficiency of queries, indices, execution plans, transaction containment boundaries, transaction isolation levels, and cache performance. Our infrastructure tuning services include network topology analysis, geographically redundant load balancing, vertical and horizontal scaling optimization, OS/container performance optimization, and middleware performance improvement.

DevSecOps

Our DevSecOps automation enhances governance, oversight, security, and accountability while improving efficiency in the software development and infrastructure-as-code release process. Our continuous integration and continuous delivery pipelines include comprehensive automated unit, functional, and security testing. Static tests (white-box) include unit testing with code coverage, cyclomatic complexity analysis, and adherence to code style and standards. Automated dynamic testing (black-box) includes performance monitoring, security profiling and penetration testing to identify potential run time attack vectors, vulnerabilities, and defects.

Enterprise Architecture

Cloud services are the most significant advancement in IT since the Internet. The rapid advancement of cloud technologies makes it increasingly difficult for traditional Enterprise Architecture (EA) to keep pace. The cloud service revolution requires a paradigm shift EA to enable enterprise customers to maximize emergent opportunities while minimizing risk to the enterprise. That paradigm is available in Agility. Our experience architects integrate architectural patterns that promote agility, consistency, improve functionality, and reduce entropy throughout the enterprise. We provide an agile and iterative approach to long term strategic planning that improves and simplifies all Information technology domains including development, infrastructure, governance, and security. We collaborate with our customers' and technology partners to develop, and improve associated management processes including governance, process automation, toolset management, across the enterprise.

Data Science

Our data scientists help customers identify patterns, trends, and associations in extremely large data sets through distributed computation and storage technologies and cloud services. We specialize in analysis, capture, curation, search, and visualization of data sets whose complexity transcends traditional data processing mechanisms. We provide the cloud infrastructure and analytical skills necessary to improve our customers' capability to manage the volume, variety, and velocity of their information assets.

Project Management

We manage projects with agility. Agility is an extension of the divide and conquer algorithm. The divide and conquer algorithm recursively deconstructs a problem into smaller related sub-problems, until the sub-problems are simple enough to solve directly. By incorporating high-frequency customer interaction with continual feedback, we ensure that we consistently conforming to customer expectations, schedules, and deliverables. We apply Agility not only to development operations, but throughout our portfolio of services.



54151S PROFESSIONAL SERVICES LABOR CATEGORY DESCRIPTIONS

Application Architect I

Functional Responsibility: Responsible for the design and development of new software products. Provides guidance and leadership to the development team on designing complex software systems. Acts as a high level technical expert and addresses issues relating to systems integration and compatibility. Works with project managers, developers, and end users to ensure application designs meet business requirements.

Education Requirements: Bachelor's degree in Computer Science or equivalent field

Minimum/General Experience: Five years of experience

Application Architect II

Functional Responsibility: Responsible for the design and development of new software products. Provides guidance and leadership to the development team on designing complex software systems. Acts as a high level technical expert and addresses issues relating to systems integration and compatibility. Works with project managers, developers, and end users to ensure application designs meet business requirements. Estimates size and schedule for software enhancements. Reviews existing programs and assists in making refinements, reducing operating time and improving current techniques. Responsible for program design, coding, testing, debugging and documentation. Instructs, directs, and checks the work of other task personnel. Responsible for quality assurance review and the evaluation of existing and new software products.

Education Requirements: Bachelor's degree in Computer Science or equivalent field

Minimum/General Experience: Eight years of experience

Continuous Integration Engineer I

Functional Responsibility: Develops and documents configuration management processes and procedures to meet the scope and complexity of systems. Maintains the CM environment and performs change control and configuration audits consistent with industry standards. Controls the change process so that only approved and validated changes are incorporated and promoted from Dev to QA to Prod. Implements version control process for hardware and software systems. Provides guidance on the selection and use of configuration management tools to store, track, and manage configuration artifacts. Creates build scripts and promotes those scripts within the software build process. Ensures that the development, test and production environments are identical in configuration to avoid inconsistencies with in environments.

Education Requirements: BA/BS in Computer Science, or equivalent experience

Minimum/General Experience: Seven years of experience

Configuration Management Analyst II

Functional Responsibility: Develops and documents configuration management processes and procedures to meet the scope and complexity of systems. Maintains the CM environment and performs change control and configuration audits consistent with industry standards. Controls the change process so that only approved and validated changes are incorporated and promoted from Dev to QA to Prod. Implements version control process for hardware and software systems. Provides guidance on the selection and use of configuration management tools to store, track, and manage configuration artifacts. Creates build scripts and promotes those scripts within the software



build process. Ensures that the development, test and production environments are identical in configuration to avoid inconsistencies with in environments. Directs and provides guidance to junior staff on configuration management related tasks.

Education Requirements: BA/BS in Computer Science, or equivalent experience

Minimum/General Experience: Ten years of experience

Database Administrator Senior

Functional Responsibility: Responsible for the configuration, installation, upgrade, migration, and maintenance of databases. Responsible for quality control and audits of databases to confirm the accuracy and functionality of data. Monitors database systems and resources to ensure that the database is available and performing at the optimum level. Performs backups, maintains logs; installs database software upgrades; restores and/or recovers data as needed. Consults on a variety of database integration issues including migration between disparate databases, maintenance/conversion and capacity planning. Works with management to develop database strategies based on customers' requirements. Recommends testing and tuning of databases to increase functionality and efficiency.

Education Requirements: BS in Computer Science, or equivalent experience.

Minimum/General Experience: Five to seven years of experience

Enterprise Architect

Functional Responsibility: Responsible for the long-term strategic planning of IT systems to improve functionality and efficiency. Provides guidance on integration and synchronization of disparate technologies to improve cost and increase productivity. Develops policies, standards and guidelines that direct the selection/development, implementation and use of technologies. Collaborates with other IT stakeholders to provide an architecture solution that is reliable, adaptable and scalable. Addresses risks associated with IT assets through the development, use and recommendation of appropriate standards and security policies. Analyses technology trends relating to security, infrastructure, and development, and provides technical vision. Collaborates with senior level technical staff to integrate project requirements while complying with industry's standard practices and SOA methodologies. Documents and presents SOA methodologies, other architectural principles and technical solutions to senior staff and IT stakeholders.

Education Requirements: Bachelor's Degree in Information Technology or equivalent field of study

Minimum/General Experience: Ten years of IT related experience or equivalent knowledge, training, and experience

Help Desk Support I

Functional Responsibility: Provides technical support via phone and /or email to local and off-site users. Analyzes and responds to incidents and determines the level of support required. Collaborates with users to diagnose problems, investigate causes, and recommend solutions. Resolves issues within the scope specified in specific SLA's or escalates the calls to the appropriate service level queue for resolution. Records incidents and maintains a database of all occurrences requesting technical assistance. Coordinates with internal support staff and/or with vendors to resolve problems. Participates in meeting with support and operations staff and provides feedback on support related issues.

Education Requirements: BA/BS

Minimum/General Experience: Two years

Help/Service Desk Support II

Functional Responsibility: Supervises support staff schedules and assigns support activities based on staff capability. Provides technical support via phone and /or email to local and off-site users. Analyzes and responds to incidents and determines the level of support required. Collaborates with users to diagnose problems, investigate causes, and recommend solutions. Resolves issues within the scope specified in specific SLA's or escalates the calls to the appropriate service level queue for resolution. Reviews incidents and incident database to ensure that problems are resolved efficiently. Coordinates with internal support staff and/or with vendors to resolve problems. Follows up with end users and customers to make sure that incidents are resolved in a timely manner. Participates in meeting with support and operations staff and provides feedback on support related issues.

Education Requirements: BA/BS

Minimum/General Experience: Five years

Infrastructure Engineer I

Functional Responsibility: Responsible for the design, implementation and maintenance of physical systems including servers, storage arrays, network devices and data centers. Installs, configures and maintains virtual hosts, operating systems, applications and databases. Documents IT infrastructure standards, processes and procedures. Schedules and coordinates infrastructure maintenance outages with all key stakeholders to ensure high availability of operations. Provides periodic status updates on scheduled maintenance and upgrade of all infrastructure systems. Troubleshoots hardware, network, software and application issues to identify bottleneck in operations and provides recommendations to ensure optimum performance and continuity of critical systems. Provides tier 3 support as needed.

Education Requirements: Bachelor's degree or higher in Computer Science or equivalent field

Minimum/General Experience: Six years of engineering experience

Infrastructure Engineer II

Functional Responsibility: Responsible for the design, implementation and maintenance of physical systems including servers, storage arrays, network devices and data centers. Installs, configures and maintains virtual hosts, operating systems, applications and databases. Develops and presents IT infrastructure standard operating procedures to senior management. Provides periodic status updates on scheduled maintenance and upgrade of all infrastructure systems. Schedules and coordinates infrastructure maintenance outages with all key stakeholders to ensure high availability of operations. Troubleshoots hardware, network, software and application issues to identify bottleneck in operations and provides recommendations to ensure optimum performance and continuity of critical systems.

Education Requirements: Bachelor's degree or higher in Computer Science or equivalent field

Minimum/General Experience: Ten years of engineering experience

Infrastructure Engineer III

Functional Responsibility: Serves as technology expert and provides guidance to junior team members. Oversees the design, implementation and maintenance of physical systems including servers, storage arrays, network devices and data centers. Provides guidance on installation, configuration and maintenance of virtual hosts, operating systems, applications and databases. Maintains ownership of high availability, high security IT operations. Develops and presents IT infrastructure standard operating procedures to senior management. Reviews and approves periodic status updates on scheduled maintenance and upgrade of all infrastructure systems. Troubleshoots hardware, network, software and application issues to identify bottleneck in operations and provides recommendations to ensure optimum performance and continuity of critical systems

Education Requirements: Bachelor's degree or higher in Computer Science or equivalent field

Minimum/General Experience: Fifteen years of engineering experience in a leadership role

Project Lead/Manager I

Functional Responsibility: Responsible for all aspects of project development and implementation from original inception to final completion. Serves as a single point of contact. Interfaces with all parties involved in the project including developers, administrators, engineers and customers. Gathers customers' requirements and establish project scope and objectives. Prepares detailed schedules, project estimates, and status reports. Allocates resources to facilitate the successful completion of projects. Responsible for project tracking and analysis. Prepares deliverables and ensures adherence to quality standards. Manages the integration of vendor tasks, and evaluates vendor deliverables. Provides recommendations and takes action to resolve any management related issues.

Education Requirements: Bachelor's degree or equivalent

Minimum/General Experience: Six years of project management or task lead experience

Project Lead/Manager II

Functional Responsibility: Responsible for all aspects of project development and implementation from original inception to final completion. Serves as a single point of contact. Interfaces with all parties involved in the project including developers, administrators, engineers and customers. Gathers customers' requirements and establish project scope and objectives. Prepares detailed schedules, project estimates, and status reports. Allocates resources to facilitate the successful completion of projects. Coordinates and conducts meetings and is responsible for project tracking and analysis. Reviews deliverables and ensures adherence to quality standards. Manages the integration of vendor tasks, and evaluates vendor deliverables. Provides recommendations and takes action to resolve any management related issues.

Education Requirements: Bachelor's degree or equivalent

Minimum/General Experience: Ten years of project management or task lead experience

Senior Applications Developer

Functional Responsibility: Develops, tests and debugs code. Works with technical staff to identify, troubleshoot and solve problems related to software. Responds to software code defects and performance bottlenecks and suggests improvements. Schedules and applies code fixes and patches to improve performance and functionality. Interfaces with end users and resolves any customer complaints. Collaborates with other development staff to prepare software user manuals. Monitors and reports any software related issues to senior staff and makes suggestions for enhancements.

Education Requirements: Bachelor's degree in Computer Science or equivalent field

Minimum/General Experience: Five years of experience

Senior Systems Engineer I or Sr. Systems Engineer

Functional Responsibility: Responsible for the design and implementation of new systems. Performs a variety of tasks related to systems design, integration and implementation. Provides quality assurance review and the evaluation of new and existing software and hardware. Coordinates with senior management and technical personnel to ensure problem resolution and customer satisfaction.

Education Requirements: Bachelor's degree in Computer Science, Engineering or equivalent field of study

Minimum/General Experience: Five years of experience

Senior Systems Engineer II

Functional Responsibility: Responsible for the design and implementation of new systems. Performs a variety of tasks related to systems design, integration and implementation. Provides quality assurance review and the evaluation of new and existing software and hardware. Coordinates with senior management and subordinate technical personnel to ensure problem resolution and customer satisfaction. Makes recommendations, if needed, for approval of major systems integration. Prepares milestone status reports and delivers presentations on the system concept to colleagues, subordinates, and end user representatives.

Education Requirements: Bachelor's degree in Computer Science, Engineering or equivalent field of study

Minimum/General Experience: Seven years of experience

Senior Systems Engineer III

Functional Responsibility: Responsible for the design and implementation of new systems. Performs a variety of tasks related to systems design, integration and implementation. Provides quality assurance review and the evaluation of new and existing software and hardware. Supervises and coordinates with subordinate technical personnel to ensure problem resolution and customer satisfaction. Makes recommendations, if needed, for approval of major systems integration. Prepares milestone status reports and deliveries/presentations on the system concept to senior staff, and end user representatives.

Education Requirements: Bachelor's degree in Computer Science, Engineering or equivalent field of study

Minimum/General Experience: Ten years of experience

Social Media Analyst

Functional Responsibility: Develops, posts and maintains social media content that confirms to customer's standards and monitors customer reputation. Plans and implements social media marketing campaigns that increase customers' social media presence. Conducts surveys and provides analytics across a variety of social media channels. Identifies performance, trends, and opportunities within various social media environments. Compiles metrics related to social media issues and presents qualitative and quantitative reports/findings to stakeholders. Collaborates with internal staff and customers to create content that is appropriate and engaging.

Education Requirements: Bachelor's degree

Minimum/General Experience: Two to three years of experience.

Subject Matter Expert I

Functional Responsibility: Responsible for planning, researching, developing, and evaluating complex Information Technology tasks. Responsible for providing technical guidance and analysis of highly specialized applications and environments. Provides high-level systems analysis, design, integration, and implementation expertise. Responsible for providing expert advice and insight on complex problems that require in-depth knowledge of the subject matter for successful implementation.

Education Requirements: Master's degree in Computer Science or Engineering or Bachelor's degree in Computer Science or Engineering with five years of experience

Minimum/General Experience: Ten years of experience

Subject Matter Expert II

Functional Responsibility: Provides significant technical knowledge and analysis of highly specialized applications and environments. Provides high-level systems analysis, design, integration, and implementation expertise. Advises on complex problems that require in-depth knowledge of the subject matter for successful implementation. Participates as needed in all phases of the software development life-cycle including planning, design, development, testing, integration, support and documentation.

Education Requirements: Master's degree in Computer Science or Engineering or Bachelor's degree in Computer Science or Engineering with seven years of experience

Minimum/General Experience: Twelve years of experience

Subject Matter Expert III

Functional Responsibility: Provides high-level subject matter proficiency for work defined in specific tasks. Provides technical expertise on highly specialized information technology applications, operational environments and systems. Advises on complex problems that require in-depth knowledge of the subject matter for successful design, integration, and implementation. Participates as needed in all phases of the software development life-cycle including planning, design, development, testing, integration, support and documentation.

Education Requirements: Master's degree in Computer Science or Engineering or Bachelor's degree in Computer Science or Engineering with ten years of experience

Minimum/General Experience: Fifteen years of experience

System Administrator I

Functional Responsibility: Responsible for the functionality, efficiency, and maintenance of one or more operating systems. Responsible for installing, configuring, monitoring, identifying and addressing operating system issues. Performs necessary software installations, updates and maintains systems in accordance with established policies and procedures. Monitors and configures operating systems to achieve optimum level of performance. Ensures system efficiency by evaluating, implementing, and managing appropriate software and hardware solutions. Responsible for scheduling system backups and database archiving. Performs necessary hardware and software audits to ensure compliance with policies, and configuration guidelines. Develops and maintains a standard

operating procedure manual. Maintains comprehensive operating manual and support documentation for hardware and software systems.

Education Requirements: Bachelor's degree in Computer Science or related field

Minimum/General Experience: Four years of experience

System Administrator II

Functional Responsibility: Responsible for the functionality, efficiency and maintenance of one or more operating systems. Responsible for installations, configuration and maintenance of systems to ensure operational efficiency. Supervises and delegates software installations, updates and maintenance of systems to conform with established policies and procedures. Coordinates and assigns various system administration tasks to personnel and evaluates their performance. Collaborates with architecture and development teams and makes recommendations for operating system enhancements to improve the reliability, scalability and performance of the system.

Education Requirements: Bachelor's degree in Computer Science or related field

Minimum/General Experience: Six years of experience

Test Engineer I

Functional Responsibility: Responsible for the creation and automation of test plans and scripts for various testing environment including but not limited to load, performance, system, regression. Consults with developers, engineers and recommends the appropriate test requirements. Identifies potential software and hardware shortfalls and risks, and recommends mitigation strategies. Collaborates with application developers, engineers and administrators to isolate and fix any bottlenecks in application/system performance and functionality. Prepares reports and documentation to convey the results and test findings.

Education Requirements: BA/BS in Computer Science or related field

Minimum/General Experience: Two years of testing experience

Test Engineer II

Functional Responsibility: Oversees the creation of test plans and scripts for various testing environment. Coordinates the effort of subordinates test staff, developers, and engineers, and authorizes the appropriate test requirement. Identifies potential software and hardware shortfalls and risks, and prepares mitigation strategies. Researches and evaluates new testing technologies. Collaborates with subordinate test engineers to isolate and fix any bottlenecks in application/system performance and functionality. Prepares reports to convey the results and test findings to senior technologists and other stakeholders. Makes recommendations to optimize software and hardware configurations based on test results and findings.

Education Requirements: BA/BS in Computer Science or related field

Minimum/General Experience: Six Years of testing experience

SIN PROFESSIONAL SERVICES PRICE LIST

GOVERNMENT SITE RATES w/IFF

Ref.	GSA IT Labor Category	Year 1	Year 2	Year 3	Year 4	Year 5
1	Application Architect I	117.95	119.96	122.00	124.07	126.18
2	Application Architect II	146.03	148.51	151.04	153.61	156.22
3	Continuous Integration Engineer I	91.55	93.11	94.69	96.30	97.93
4	Configuration Management Analyst II	133.62	135.89	138.20	140.55	142.94
5	Database Administrator Senior	121.00	123.06	125.15	127.28	129.44
6	Enterprise Architect	142.05	144.47	146.92	149.42	151.96
7	Help Desk Support I **	58.76	59.76	60.78	61.81	62.86
8	Help/Service Desk Support II **	71.05	72.26	73.49	74.74	76.01
9	Infrastructure Engineer I	144.63	147.09	149.59	152.14	154.72
10	Infrastructure Engineer II	154.97	157.60	160.28	163.01	165.78
11	Infrastructure Engineer III	161.59	164.34	167.13	169.97	172.86
12	Project Lead/Manager I	152.44	155.03	157.66	160.34	163.07
13	Project Lead/Manager II	182.42	185.52	188.67	191.88	195.14
14	Senior Applications Developer	144.71	147.17	149.68	152.22	154.81
15	Senior Systems Engineer I	120.00	122.04	124.11	126.22	128.37
16	Senior Systems Engineer II	150.39	152.95	155.55	158.19	160.88
17	Senior Systems Engineer III	161.60	164.35	167.14	169.98	172.87
18	Social Media Analyst	103.78	105.54	107.34	109.16	111.02
19	Subject Matter Expert I	186.89	190.07	193.30	196.58	199.92
20	Subject Matter Expert II	226.18	230.02	233.93	237.91	241.96
21	Subject Matter Expert III	260.16	264.59	269.08	273.66	278.31
22	System Administrator I	98.95	100.63	102.34	104.08	105.85
23	System Administrator II	110.65	112.53	114.44	116.39	118.37
24	Test Engineer I	99.75	101.44	103.17	104.92	106.71
25	Test Engineer II	125.27	127.40	129.57	131.77	134.01



CONTRACTOR SITE RATES w/IFF

Ref.	GSA IT Labor Category	Year 1	Year 2	Year 3	Year 4	Year 5
1	Application Architect I	129.75	131.95	134.20	136.48	138.80
2	Application Architect II	160.63	163.37	166.14	168.97	171.84
3	Continuous Integration Engineer I	100.70	102.42	104.16	105.93	107.73
4	Configuration Management Analyst II	146.98	149.48	152.02	154.61	157.24
5	System Database Administrator	133.10	135.37	137.67	140.01	142.39
6	Enterprise Architect	156.26	158.91	161.61	164.36	167.16
7	Help Desk Support I**	64.64	65.74	66.85	67.99	69.15
8	Help/Service Desk Support II**	78.16	79.48	80.84	82.21	83.61
9	Infrastructure Engineer I	159.10	161.80	164.55	167.35	170.20
10	Infrastructure Engineer II	170.47	173.36	176.31	179.31	182.36
11	Infrastructure Engineer III	177.75	180.77	183.85	186.97	190.15
12	Project Lead/Manager I	167.68	170.53	173.43	176.38	179.37
13	Project Lead/Manager II	200.66	204.07	207.54	211.07	214.66
14	Senior Applications Developer	159.19	161.89	164.64	167.44	170.29
15	Senior Systems Engineer I	132.00	134.24	136.52	138.84	141.20
16	Senior Systems Engineer II	165.43	168.24	171.10	174.01	176.97
17	Senior Systems Engineer III	177.76	180.78	183.86	186.98	190.16
18	Social Media Analyst	114.16	116.10	118.07	120.08	122.12
19	Subject Matter Expert I	205.58	209.07	212.63	216.24	219.92
20	Subject Matter Expert II	248.80	253.03	257.33	261.70	266.15
21	Subject Matter Expert III	286.18	291.04	295.99	301.02	306.14
22	System Administrator I	108.85	110.70	112.58	114.49	116.44
23	System Administrator II	121.72	123.78	125.89	128.03	130.21
24	Test Engineer I	109.72	111.59	113.49	115.41	117.38
25	Test Engineer II	137.80	140.14	142.53	144.95	147.41



SCA MATRIX

SCA Matrix		
SCA Eligible Contract Labor Category	SCA Equivalent Code Title	WD Number
Help Desk Support I**	14041 COMPUTER OPERATOR I	1967-0442
Help/Service Desk Support II**	14042 COMPUTER OPERATOR II	1967-0442

The Service Contract Act (SCA) is applicable to this contract and it includes SCA applicable labor categories. The prices for the indicated (**) SCA labor categories are based on the U.S. Department of Labor Wage Determination Number(s) identified in the SCA matrix. The prices awarded are in line with the geographic scope of the contract (i.e. nationwide).

The mapping to SCA labor categories in the matrix is representative only and does not limit the use of the Development Consultants Incorporated's labor category to those SCA titles identified in the matrix nor does it limit the use of the Development Consultants Incorporated's labor category only to services covered by the SCA. The services provided under each labor category will be determined at the task order level.



TERMS AND CONDITIONS APPLICABLE TO PURCHASE OF CLOUD COMPUTING PRODUCTS AND CLOUD RELATED IT PROFESSIONAL SERVICES (SPECIAL ITEM NUMBER 518210C)

1. SCOPE

The prices, terms and conditions stated under Special Item Number (SIN) 518210C Cloud Computing Services (i.e. IaaS, etc.) and Cloud-Related Professional Services apply exclusively to Cloud Computing Services (i.e. IaaS, etc.) and Cloud-Related Professional Services within the scope of this Information Technology Schedule.

This SIN provides ordering activities with access to Cloud (i.e. SaaS, etc.) technical services that run in cloud environments and meet the NIST Definition of Cloud Computing Essential Characteristics. Cloud Services [(i.e. SaaS, etc.)] relating to or impinging on cloud that do not meet all NIST essential characteristics should be listed in other SINs. (For example: Software subscription services or Software as a Service offerings that do not meet the essential “measured service” requirement may meet the definition of “Term Licenses” under SIN 511210. See the Measured Service requirement in Table 2, below.)

The scope of this SIN is limited to cloud capabilities provided entirely as a “pay as you go” service and cloud-related IT professional services. Hardware, software and other artifacts acquired to supporting the physical construction of a private or other cloud are out of scope for this SIN. Currently, an Ordering Activity can procure the hardware and software needed to build private on premise cloud functionality, through combining different services on other IT Schedule 70 SINs (e.g. 33411, 511210, 54151, 54151ECOM, 54151S).

Sub-categories in scope for this SIN are the three NIST Service Models: Software as a Service (SaaS), Platform as a Service (PaaS), and Infrastructure as a Service (IaaS). Offerors may optionally select a single sub-category that best fits a proposed cloud service offering. Only one sub-category may be selected per each proposed cloud service offering. Offerors may elect to submit multiple cloud service offerings, each with its own single sub-category. The selection of one of three sub-categories does not prevent Offerors from competing for orders under the other two sub-categories.

See service model guidance for advice on sub-category selection.

Sub-category selection within this SIN is optional for any individual cloud service offering, and new cloud computing technologies that do not align with the aforementioned three sub-categories may be included without a sub-category selection so long as they comply with the essential characteristics of cloud computing as outlined by NIST.

See Table 1 for a representation of the scope and sub-categories.

Table 1: Cloud Computing Services SIN

SIN Description	Sub-Categories ¹
<ul style="list-style-type: none"> • Commercially available cloud computing services • Meets the National Institute for Standards and Technology (NIST) definition of Cloud Computing essential characteristics • Open to all deployment models (private, public, community or hybrid), vendors specify deployment models 	<p>1. Software as a Service (SaaS): Consumer uses provider’s applications on cloud infrastructure. Does not manage/control platform or infrastructure. Limited application level configuration may be available.</p> <p>2. Platform as a Service (PaaS): Consumer deploys applications onto cloud platform service using provider-supplied tools. Has control over deployed applications and some limited platform configuration but does not manage the platform or infrastructure.</p> <p>3. Infrastructure as a Service (IaaS): Consumer provisions computing resources. Has control over OS, storage, platform, deployed applications and some limited infrastructure configuration, but does not manage the infrastructure.</p>

2. DESCRIPTION OF CLOUD COMPUTING SERVICES AND PRICING

a. Service Description Requirements for Listing Contractors

The description requirements below are in addition to the overall Schedule 70 evaluation criteria described in SCP-FSS-001-N Instructions Applicable to New Offerors (Alternate I – MAR 2016) or SCP-FSS-001-S Instructions Applicable to Successful FSS Program Contractors, as applicable, SCP-FSS-004 and other relevant publications.

Refer to overall Schedule 70 requirements for timelines related to description and other schedule updates, including but not limited to clauses 552.238-81 – section E and clause I-FSS-600.

Table 2 summarizes the additional Contractor-provided description requirements for services proposed under the Cloud Computing Services SIN. All mandatory description requirements must be complete, and adequate according to evaluation criteria.

In addition there is one “Optional” reporting descriptions which exists to provide convenient service selection by relevant criteria. Where provided, optional description requirements must be complete and adequate according to evaluation criteria:

- The NIST Service Model provides sub-categories for the Cloud SIN and is strongly encouraged, but not required. The Service Model based sub-categories provide this SIN with a structure to assist ordering activities in locating and comparing services of interest. Contractors may optionally select the single service model most closely corresponding to the specific service offering.
- If a sub-category is selected it will be evaluated with respect to the NIST Service Model definitions and guidelines in “Guidance for Contractors”.

¹ Offerors may optionally select the single sub-category that best fits each cloud service offering, per Service Model Guidance, or select no sub-category if the offering does not fit an existing NIST service mode

Table 2: Cloud Service Description Requirements

#	Description Requirement	Reporting Type	Instructions
1	Provide a brief written description of how the proposed cloud computing services satisfies each individual essential NIST Characteristic	Mandatory	The cloud service must be capable of satisfying each of the five NIST essential Characteristics as outlined in NIST Special Publication 800-145. See ‘GUIDANCE FOR CONTRACTORS: NIST Essential Characteristics’ below in this document for detailed overall direction, as well as guidance on inheriting essential characteristics.
2	Select NIST deployment models for the cloud computing service proposed.	Mandatory	Contractors must select at least one NIST deployment model as outlined in NIST Special Publication 800- 145 describing how the proposed cloud computing service is deployed. Select multiple deployment models if the service is offered in more than one deployment model. See ‘GUIDANCE FOR CONTRACTORS: NIST Deployment Model’ below in this document for detailed direction on how to best categorize a service for the NIST deployment models.
3	Optionally select the most appropriate NIST service model that will be the designated sub- category, or may select no sub- category.	Optional	Contractor may select a single NIST Service model to sub- categorize the service as outlined in NIST Special Publication 800-145. Sub-category selection is optional but recommended. See ‘GUIDANCE FOR CONTRACTORS: NIST Service Model’ below in this document for detailed direction on how to best categorize a service for the NIST IaaS, PaaS, and SaaS service models.

b. Pricing of Cloud Computing Services

All current pricing requirements for MAS, including provision SCP-FSS-001-N (Section III Price Proposal), SCP-FSS-001-S, SCP-FSS-004 (Section III Price Proposal), and clause I-FSS-600 Contract Price Lists, apply. At the current time there is no provision for reducing or eliminating standard price list posting requirements to accommodate rapid cloud price fluctuations.

In addition to standard pricing requirements, all pricing models must have the core capability to meet the NIST Essential Cloud Characteristics, particularly with respect to on-demand self-service, while allowing alternate variations at the task order level at agency discretion, pursuant to the guidance on NIST Essential Characteristics.

3. RESPONSIBILITIES OF THE CONTRACTOR

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

a. Acceptance Testing

Any required Acceptance Test Plans and Procedures shall be negotiated by the Ordering Activity at task order level. The Contractor shall perform acceptance testing of the systems for Ordering Activity approval in accordance with the approved test procedures.

b. Training

If training is provided commercially the Contractor shall provide normal commercial installation, operation, maintenance, and engineering interface training on the system. Contractor is responsible for indicating if there are separate training charges.

c. Information Assurance/Security Requirements

The contractor shall meet information assurance/security requirements in accordance with the Ordering Activity requirements at the Task Order level.

d. Related Professional Services

The Contractor is responsible for working with the Ordering Activity to identify related professional services and any other services available on other SINs that may be associated with deploying a complete cloud solution. Any additional substantial and ongoing IT professional services related to the offering such as assessing, preparing, refactoring, migrating, DevOps, developing new cloud based applications and managing/governing a cloud implementation may be offered per the guidelines below.

e. Performance of Cloud Computing Services

The Contractor shall respond to Ordering Activity requirements at the Task Order level with proposed capabilities to Ordering Activity performance specifications or indicate that only standard specifications are offered. In all cases the Contractor shall clearly indicate standard service levels, performance and scale capabilities.

The Contractor shall provide appropriate cloud computing services on the date and to the extent and scope agreed to by the Contractor and the Ordering Activity.

f. Reporting

The Contractor shall respond to Ordering Activity requirements and specify general reporting capabilities available for the Ordering Activity to verify performance, cost and availability.

In accordance with commercial practices, the Contractor may furnish the Ordering Activity/user with a monthly summary Ordering Activity report.

4. RESPONSIBILITIES OF THE ORDERING ACTIVITY

The Ordering Activity is responsible for indicating the cloud computing services requirements unique to the Ordering Activity. Additional requirements should not contradict existing SIN or IT MAS Terms and Conditions. Ordering Activities should include (as applicable) Terms & Conditions to address Pricing, Security, Data Ownership, Geographic Restrictions, Privacy, SLAs, etc.

Cloud services typically operate under a shared responsibility model, with some responsibilities assigned to the Cloud Service Provider (CSP), some assigned to the Ordering Activity, and others shared between the two. The

distribution of responsibilities will vary between providers and across service models. Ordering activities should engage with CSPs to fully understand and evaluate the shared responsibility model proposed. Federal Risk and Authorization Management Program (FedRAMP) documentation will be helpful regarding the security aspects of shared responsibilities, but operational aspects may require additional discussion with the provider.

a. Ordering Activity Information Assurance/Security Requirements Guidance

- i. 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) as applicable.
- ii. The Ordering Activity shall assign a required impact level for confidentiality, integrity and availability (CIA) prior to issuing the initial statement of work.² The Contractor must be capable of meeting at least the minimum security requirements assigned against a low-impact information system in each CIA assessment area (per FIPS 200) and must detail the FISMA capabilities of the system in each of CIA assessment area.
- iii. Agency level FISMA certification, accreditation, and evaluation activities are the responsibility of the Ordering Activity. The Ordering Activity reserves the right to independently evaluate, audit, and verify the FISMA compliance for any proposed or awarded Cloud Computing Services.
- iv. The Ordering Activity has final responsibility for assessing the FedRAMP status of the service, complying with and making a risk-based decision to grant an Authorization to Operate (ATO) for the cloud computing service, and continuous monitoring. A memorandum issued by the Office of Management and Budget (OMB) on Dec 8, 2011 outlines the responsibilities of Executive departments and agencies in the context of FedRAMP compliance.³
- v. Ordering activities are responsible for determining any additional information assurance and security related requirements based on the nature of the application and relevant mandates.

b. Deployment Model

If a particular deployment model (Private, Public, Community, or Hybrid) is desired, Ordering Activities are responsible for identifying the desired model(s). Alternately, Ordering Activities could identify requirements and assess Contractor responses to determine the most appropriate deployment model(s).

c. 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.

d. Interoperability

Ordering Activities are responsible for identifying interoperability requirements. Ordering Activities should clearly delineate requirements for API implementation and standards conformance.

e. Performance of Cloud Computing Services

The Ordering Activity should clearly indicate any custom minimum service levels, performance and scale requirements as part of the initial requirement.

² *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”)*

f. Reporting

The Ordering Activity should clearly indicate any cost, performance or availability reporting as part of the initial requirement.

g. Privacy

The Ordering Activity should specify the privacy characteristics of their service and engage with the Contractor to determine if the cloud service is capable of meeting Ordering Activity requirements. For example, a requirement could be requiring assurance that the service is capable of safeguarding Personally Identifiable Information (PII), in accordance with NIST SP 800-122⁴ and OMB memos M-06-16⁵ and M-07-16⁶. An Ordering Activity will determine what data elements constitute PII according to OMB Policy, NIST Guidance and Ordering Activity policy.

h. Accessibility

The Ordering Activity should specify the accessibility characteristics of their service and engage with the Contractor to determine the cloud service is capable of meeting Ordering Activity requirements. For example, a requirement could require assurance that the service is capable of providing accessibility based on Section 508 of the Rehabilitation Act of 1973 (29 U.S.C. 794d).

i. Geographic Requirements

Ordering activities are responsible for specifying any geographic requirements and engaging with the Contractor to determine that the cloud services offered have the capabilities to meet geographic requirements for all anticipated task orders. Common geographic concerns could include whether service data, processes and related artifacts can be confined on request to the United States and its territories, or the continental United States (CONUS).

j. Data Ownership and Retrieval and Intellectual Property

Intellectual property rights are not typically transferred in a cloud model. In general, CSPs retain ownership of the Intellectual Property (IP) underlying their services and the customer retains ownership of its intellectual property. The CSP gives the customer a license to use the cloud services for the duration of the contract without transferring rights. The government retains ownership of the IP and data they bring to the customized use of the service as spelled out in the FAR and related materials.

³ *MEMORANDUM FOR CHIEF INFORMATION OFFICERS: Security Authorization of Information Systems in Cloud Computing Environments. December 8, 2011.*

⁴ *NIST SP 800-122, "Guide to Protecting the Confidentiality of Personally Identifiable Information (PII)"*

⁵ *OMB memo M-06-16: Protection of Sensitive Agency Information*
<http://www.whitehouse.gov/sites/default/files/omb/memoranda/fy2006/m06-16.pdf>

⁶ *OMB Memo M-07-16: Safeguarding Against and Responding to the Breach of Personally Identifiable Information* <http://www.whitehouse.gov/sites/default/files/omb/memoranda/fy2007/m07-16.pdf>



General considerations of data ownership and retrieval are covered under the terms of Schedule 70 and the FAR and other laws, ordinances, and regulations (Federal, State, City, or otherwise). Because of considerations arising from cloud shared responsibility models, ordering activities should engage with the Contractor to develop more cloud-specific understandings of the boundaries between data owned by the government and that owned by the cloud service provider, and the specific terms of data retrieval.

In all cases, the Ordering Activity should enter into an agreement with a clear and enforceable understanding of the boundaries between government and cloud service provider data, and the form, format and mode of delivery for each kind of data belonging to the government.

The Ordering Activity should expect that the Contractor shall transfer data to the government at the government's request at any time, and in all cases when the service or order is terminated for any reason, by means, in formats and within a scope clearly understood at the initiation of the service. Example cases that might require clarification include status and mode of delivery for:

- Configuration information created by the government and affecting the government's use of the cloud provider's service.
- Virtual machine configurations created by the government but operating on the cloud provider's service.
- Profile, configuration and other metadata used to configure SaaS application services or PaaS platform services.

The key is to determine in advance the ownership of classes of data and the means by which Government owned data can be returned to the Government.

k. Service Location Distribution

The Ordering Activity should determine requirements for continuity of operations and performance and engage with the Contractor to ensure that cloud services have adequate service location distribution to meet anticipated requirements. Typical concerns include ensuring that:

- Physical locations underlying the cloud are numerous enough to provide continuity of operations and geographically separate enough to avoid an anticipated single point of failure within the scope of anticipated emergency events.
- Service endpoints for the cloud are able to meet anticipated performance requirements in terms of geographic proximity to service requestors.

Note that cloud providers may address concerns in the form of minimum distance between service locations, general regions where service locations are available, etc.

5. GUIDANCE FOR CONTRACTORS

This section offers guidance for interpreting the Contractor Description Requirements in Table 2, including the NIST essential cloud characteristics, service models and deployment models. This section is not a list of requirements.

Contractor-specific definitions of cloud computing characteristics and models or significant variances from the NIST essential characteristics or models are discouraged and will **not** be considered in the scope of this SIN or accepted in response to Factors for Evaluation. The only applicable cloud characteristics, service model/subcategories and deployment models for this SIN will be drawn from the NIST 800-145 special publication. Services qualifying for listing as cloud computing services under this SIN must substantially satisfy the essential characteristics of cloud computing as documented in the NIST Definition of Cloud Computing SP 800-145⁷.

Contractors must select deployment models corresponding to each way the service can be deployed. Multiple deployment model designations for a single cloud service are permitted but at least one deployment model must be selected.

In addition, contractors submitting services for listing under this SIN are encouraged to select a sub-category for each service proposed under this SIN with respect to a single principal NIST cloud service model that most aptly characterizes the service. Service model categorization is optional.

Both service and deployment model designations must accord with NIST definitions. Guidance is offered in this document on making the most appropriate selection.

a. NIST Essential Characteristics

General Guidance

NIST's essential cloud characteristics provide a consistent metric for whether a service is eligible for inclusion in this SIN. It is understood that due to legislative, funding and other constraints that government entities cannot always leverage a cloud service to the extent that all NIST essential characteristics are commercially available. For the purposes of the Cloud SIN, meeting the NIST essential characteristics is determined by whether each essential capability of the commercial service is available for the service, whether or not the Ordering Activity actually requests or implements the capability. The guidance in Table 3 offers examples of how services might or might not be included based on the essential characteristics, and how the Contractor should interpret the characteristics in light of current government contracting processes.

⁷ <http://csrc.nist.gov/publications/nistpubs/800-145/SP800-145.pdf>



Table 3: Guidance on Meeting NIST Essential Characteristics

Characteristic	Capability	Guidance
On-demand self-service	<ul style="list-style-type: none"> Ordering activities can directly provision services without requiring Contractor intervention. This characteristic is typically implemented via a service console or programming interface for provisioning 	<p>Government procurement guidance varies on how to implement on-demand provisioning at this time.</p> <p>Ordering activities may approach on-demand in a variety of ways, including “not-to-exceed” limits, or imposing monthly or annual payments on what are essentially on demand services.</p> <p>Services under this SIN must be capable of true on- demand self-service, and ordering activities and Contractors must negotiate how they implement on demand capabilities in practice at the task order level:</p> <ul style="list-style-type: none"> Ordering activities must specify their procurement approach and requirements for on-demand service Contractors must propose how they intend to meet the approach Contractors must certify that on-demand self-service is technically available for their service should procurement guidance become available.
Broad Network Access	<ul style="list-style-type: none"> Ordering activities are able to access services over standard agency networks Service can be accessed and consumed using standard devices such as browsers, tablets and mobile phones 	<p>Broad network access must be available without significant qualification and in relation to the deployment model and security domain of the service</p> <ul style="list-style-type: none"> Contractors must specify any ancillary activities, services or equipment required to access cloud services or integrate cloud with other cloud or non- cloud networks and services. For example a private cloud might require an Ordering Activity to purchase or provide a dedicated router, etc. which is acceptable but should be indicated by the Contractor.
Resource Pooling	<ul style="list-style-type: none"> Pooling distinguishes cloud services from offsite hosting. Ordering activities draw resources from a common pool maintained by the Contractor 	<ul style="list-style-type: none"> The cloud service must draw from a pool of resources and provide an automated means for the Ordering Activity to dynamically allocate them.



	<ul style="list-style-type: none">Resources may have general characteristics such as regional location	<ul style="list-style-type: none">Manual allocation, e.g. manual operations at a physical server farm where Contractor staff configure servers in response to Ordering Activity requests, does not meet this requirementSimilar concerns apply to software and platform models; automated provisioning from a pool is requiredOrdering activities may request dedicated physical hardware, software or platform resources to access a private cloud deployment service. However the provisioned cloud resources must be drawn from a common pool and automatically allocated on request.
Rapid Elasticity	<ul style="list-style-type: none">Rapid provisioning and de-provisioning commensurate with demand	<ul style="list-style-type: none">Rapid elasticity is a specific demand-driven case of self-serviceProcurement guidance for on-demand self-service applies to rapid elasticity as well, i.e. rapid elasticity must be technically available but ordering activities and Contractors may mutually negotiate other contractual arrangements for procurement and payment.'Rapid' should be understood as measured in minutes and hours, not days or weeks.Elastic capabilities by manual request, e.g. via a console operation or programming interface call, are required.Automated elasticity which is driven dynamically by system load, etc. is optional. Contractors must specify whether automated demand-driven elasticity is available and the general mechanisms that drive the capability.
Measured Service	<ul style="list-style-type: none">Measured service should be understood as a reporting requirement that enables an Ordering Activity to control their use in cooperation with self service	<ul style="list-style-type: none">Procurement guidance for on-demand self-service applies to measured service as well, i.e. rapid elasticity must be technically available but ordering activities and Contractors may mutually designate other contractual arrangements.Regardless of specific contractual arrangements, reporting must indicate actual usage, be continuously available to the Ordering Activity, and provide meaningful metrics appropriate to the service measured



		<ul style="list-style-type: none"> Contractors must specify that measured service is available and the general sort of metrics and mechanisms available
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Inheriting Essential Characteristics

Cloud services may depend on other cloud services, and cloud service models such as PaaS and SaaS are able to inherit essential characteristics from other cloud services that support them. For example a PaaS platform service can inherit the broad network access made available by the IaaS service it runs on, and in such a situation would be fully compliant with the broad network access essential characteristic. Services inheriting essential characteristics must make the inherited characteristic fully available at their level of delivery to claim the relevant characteristic by inheritance.

Inheriting characteristics does not require the inheriting provider to directly bundle or integrate the inherited service, but it does require a reasonable measure of support and identification. For example, the Ordering Activity may acquire an IaaS service from “Provider A” and a PaaS service from “Provider B”. The PaaS service may inherit broad network access from “Provider A” but must identify and support the inherited service as an acceptable IaaS provider.

Assessing Broad Network Access

Typically broad network access for public deployment models implies high bandwidth access from the public internet for authorized users. In a private cloud deployment internet access might be considered broad access, as might be access through a dedicated shared high bandwidth network connection from the Ordering Activity, in accord with the private nature of the deployment model.

Resource Pooling and Private Cloud

All cloud resource pools are finite, and only give the appearance of infinite resources when sufficiently large, as is sometimes the case with a public cloud. The resource pool supporting a private cloud is typically smaller with more visible limits. A finite pool of resources purchased as a private cloud service qualifies as resource pooling so long as the resources within the pool can be dynamically allocated to the ultimate users of the resource, even though the pool itself appears finite to the Ordering Activity that procures access to the pool as a source of dynamic service allocation.

b. NIST Service Model

The Contractor may optionally document the service model of cloud computing (e.g. IaaS, PaaS, SaaS, or a combination thereof, that most closely describes their offering, using the definitions in The NIST Definition of Cloud Computing SP 800-145. The following guidance is offered for the proper selection of service models.

NIST’s service models provide this SIN with a set of consistent sub-categories to assist ordering activities in locating and comparing services of interest. Service model is primarily concerned with the nature of the service offered and the staff and activities most likely to interact with the service. Contractors should select a single service model most closely corresponding to their proposed service based on the guidance below. It is understood that cloud services can technically incorporate multiple service models and the intent is to provide the single best categorization of the service.

Contractors should take care to select the NIST service model most closely corresponding to each service offered. Contractors should not invent, proliferate or select multiple cloud service model sub-categories to distinguish their offerings, because ad-hoc categorization prevents consumers from comparing similar offerings. Instead vendors should make full use of the existing NIST categories to the fullest extent possible.

For example, in this SIN an offering commercially marketed by a Contractor as “Storage as a Service” would be properly characterized as Infrastructure as a Service (IaaS), storage being a subset of infrastructure. Services commercially marketed as “LAMP as a Service” or “Database as a Service” would be properly characterized under this SIN as Platform as a Service (PaaS), as they deliver two kinds of platform services. Services commercially marketed as “Travel Facilitation as a Service” or “Email as a Service” would be properly characterized as species of Software as a Service (SaaS) for this SIN.

However, Contractors can and should include appropriate descriptions (include commercial marketing terms) of the service in the full descriptions of the service’s capabilities.

When choosing between equally plausible service model sub-categories, Contractors should consider several factors:

- 1) **Visibility to the Ordering Activity.** Service model sub-categories in this SIN exist to help Ordering Activities match their requirements with service characteristics. Contractors should select the most intuitive and appropriate service model from the point of view of an Ordering Activity.
- 2) **Primary Focus of the Service.** Services may offer a mix of capabilities that span service models in the strict technical sense. For example, a service may offer both IaaS capabilities for processing and storage, along with some PaaS capabilities for application deployment, or SaaS capabilities for specific applications. In a service mix situation the Contractor should select the service model that is their primary focus. Alternatively contractors may choose to submit multiple service offerings for the SIN, each optionally and separately subcategorized.
- 3) **Ordering Activity Role.** Contractors should consider the operational role of the Ordering Activity’s primary actual consumer or operator of the service. For example services most often consumed by system managers are likely to fit best as IaaS; services most often consumed by application deployers or developers as PaaS, and services most often consumed by business users as SaaS.
- 4) **Lowest Level of Configurability.** Contractors can consider IaaS, PaaS and SaaS as an ascending hierarchy of complexity, and select the model with the lowest level of available Ordering Activity interaction. As an example, virtual machines are an IaaS service often bundled with a range of operating systems, which are PaaS services. The Ordering Activity usually has access to configure the lower level IaaS service, and the overall service should be considered IaaS. In cases where the Ordering Activity cannot configure the speed, memory, network configuration, or any other aspect of the IaaS component, consider categorizing as a PaaS service.

Cloud management and cloud broker services should be categorized based on their own characteristics and not those of the other cloud services that are their targets. Management and broker services typically fit the SaaS service model, regardless of whether the services they manage are SaaS, PaaS or IaaS. Use Table 3 to determine which service model is appropriate for the cloud management or cloud broker services, or, alternately choose not to select a service model for the service.

The guidance in Table 4 offers examples of how services might be properly mapped to NIST service models and how a Contractor should interpret the service model sub-categories.



Table 4: Guidance on Mapping to NIST Service Models

Service Model	Guidance
Infrastructure as a Service (IaaS)	<p>Select an IaaS model for service based equivalents of hardware appliances such as virtual machines, storage devices, routers and other physical devices.</p> <ul style="list-style-type: none">• IaaS services are typically consumed by system or device managers who would configure physical hardware in a non-cloud setting• The principal customer interaction with an IaaS service is provisioning then configuration, equivalent to procuring and then configuring a physical device. <p>Examples of IaaS services include virtual machines, object storage, disk block storage, network routers and firewalls, software defined networks.</p> <p>Gray areas include services that emulate or act as dedicated appliances and are directly used by applications, such as search appliances, security appliances, etc. To the extent that these services or their emulated devices provide direct capability to an application they might be better classified as Platform services (PaaS). To the extent that they resemble raw hardware and are consumed by other platform services they are better classified as IaaS.</p>
Platform as a Service (PaaS)	<p>Select a PaaS model for service based equivalents of complete or partial software platforms. For the purposes of this classification, consider a platform as a set of software services capable of deploying all or part of an application.</p> <ul style="list-style-type: none">• A complete platform can deploy an entire application. Complete platforms can be proprietary or open source• Partial platforms can deploy a component of an application which combined with other components make up the entire deployment.• PaaS services are typically consumed by application deployment staff whose responsibility is to take a completed agency application and cause it to run on the designated complete or partial platform service.• The principal customer interaction with a PaaS service is deployment, equivalent to deploying an application or portion of an application on a software platform service.• A limited range of configuration options for the platform service may be available. <p>Examples of complete PaaS services include:</p> <ul style="list-style-type: none">• A Linux/Apache/MySQL/PHP (LAMP) platform ready to deploy a customer PHP application,• a Windows .Net platform ready to deploy a .Net application,• A custom complete platform ready to develop and deploy an customer application in a proprietary language• A multiple capability platform ready to deploy an arbitrary customer application on a range of underlying software services. <p>The essential characteristic of a complete PaaS is defined by the customer's ability to deploy a complete custom application directly on the platform.</p>



<p>Software as a Service (SaaS)</p>	<p>PaaS includes partial services as well as complete platform services. Illustrative examples of individual platform enablers or components include:</p> <ul style="list-style-type: none">• A database service ready to deploy a customer’s tables, views and procedures,• A queuing service ready to deploy a customer’s message definitions• A security service ready to deploy a customer’s constraints and target applications for continuous monitoring <p>The essential characteristic of an individual PaaS component is the customer’s ability to deploy their unique structures and/or data onto the component for a partial platform function.</p> <p>Note that both the partial and complete PaaS examples all have two things in common:</p> <ul style="list-style-type: none">• They are software services, which offer significant core functionality out of the box• They must be configured with customer data and structures to deliver results <p>As noted in IaaS, operating systems represent a grey area in that OS is definitely a platform service, but is typically bundled with IaaS infrastructure. If your service provides an OS but allows for interaction with infrastructure, please sub-categorize it as IaaS. If your service “hides” underlying infrastructure, consider it as PaaS.</p> <p>Select a SaaS model for service based equivalents of software applications.</p> <ul style="list-style-type: none">• SaaS services are typically consumed by business or subject-matter staff who would interact directly with the application in a non-cloud setting• The principal customer interaction with a SaaS service is actual operation and consumption of the application services the SaaS service provides. <p>Some minor configuration may be available, but the scope of the configuration is limited to the scope and then the permissions of the configuring user. For example an agency manager might be able to configure some aspects of the application for their agency but not all agencies. An agency user might be able to configure some aspects for themselves but not everyone in their agency. Typically only the Contractor would be permitted to configure aspects of the software for all users.</p> <p>Examples of SaaS services include email systems, business systems of all sorts such as travel systems, inventory systems, etc., wiki’s, websites or content management systems, management applications that allow a customer to manage other cloud or non-cloud services, and in general any system where customers interact directly for a business purpose.</p> <p>Gray areas include services that customers use to configure other cloud services, such as cloud management software, cloud brokers, etc. In general these sorts of systems should be considered SaaS, per guidance in this document.</p>
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c. Deployment Model

Deployment models (e.g. private, public, community, or hybrid) are not restricted at the SIN level and any specifications for a deployment model are the responsibility of the Ordering Activity.

Multiple deployment model selection is permitted, but at least one model must be selected. The guidance in Table 4 offers examples of how services might be properly mapped to NIST deployment models and how the Contractor should interpret the deployment model characteristics. Contractors should take care to select the range of NIST deployment models most closely corresponding to each service offered.

Note that the scope of this SIN does not include hardware or software components used to construct a cloud, only cloud capabilities delivered as a service, as noted in the Scope section.

Table 5: Guidance for Selecting a Deployment Model

Deployment Model	Guidance
Private Cloud	The service is provided exclusively for the benefit of a definable organization and its components; access from outside the organization is prohibited. The actual services may be provided by third parties, and may be physically located as required, but access is strictly defined by membership in the owning organization.
Public Cloud	The service is provided for general public use and can be accessed by any entity or organization willing to contract for it.
Community Cloud	The service is provided for the exclusive use of a community with a definable shared boundary such as a mission or interest. As with private cloud, the service may be in any suitable location and administered by a community member or a third party.
Hybrid Cloud	The service is composed of one or more of the other models. Typically hybrid models include some aspect of transition between the models that make them up, for example a private and public cloud might be designed as a hybrid cloud where events like increased load permit certain specified services in the private cloud to run in a public cloud for extra capacity, e.g. bursting.

6. INFORMATION PERTAINING TO CLOUD RELATED IT PROFESSIONAL SERVICES

NOTE: Offerors may offer Cloud Services (i.e. IaaS, etc.) exclusively; it is not a requirement to also offer Cloud Related IT Professional Services. Similarly, offerors of Cloud Related IT Professional Services are not required to also offer Cloud Services (i.e. IaaS, etc.). Offerors who have capabilities in both Cloud Services (i.e. IaaS, etc.) and Cloud Related IT Professional Services may offer both, under this SIN.

NOTE: ****Labor categories under Special Item Number 54151S “Information Technology Professional Services may remain under 54151S, unless they are specific to the Cloud Computing Products and IT Professional Services 518210C. Labor specific to Cloud Computing should be positioned by Contractors under 518210C in order for Contractors to have the opportunity to bid on requests for quotes that are generated exclusively under the Cloud SIN. Offerors may offer Cloud IT Professional Services exclusively; it is not a requirement to also offer Cloud Services (i.e. IaaS).

a. SCOPE OF 518210C Cloud Related IT Professional Services

(1) The labor categories, prices, terms and conditions stated under Special Item Numbers 518210C Cloud Services and Related IT Professional Services apply exclusively to this SIN within the scope of this Information Technology Schedule. It is anticipated that the relevant IT Professional Services for this SIN (518210C) are related to the following: assessing cloud solutions, preparing for cloud solutions, refactoring legacy solutions for cloud migration, migrating legacy or other systems to cloud solutions, DevOps, developing new cloud based applications and providing management/governance for cloud solutions.

Contractors may propose other types of relevant professional services as long as they are specifically designed to work within and/or support the types of cloud product services described in 518210C.

(2) Cloud Related IT Professional Services provided under this SIN shall comply with all certifications and industry standards as applicable pertaining to the type of services as specified by ordering agency.

(3) The Contractor shall provide Cloud Related IT Professional Services at the Contractor’s facility and/or at the ordering activity location, as agreed to by the Contractor and the ordering activity.

b. ORDER

(1) Agencies may use written orders, Electronic Data Interchange (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 order shall specify the availability of funds and the period for which funds are available.

(2) 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.

c. PERFORMANCE OF SERVICES

(1) The Contractor shall commence performance of Cloud Related IT Professional Services on the date agreed to by the Contractor and the ordering activity.

(2) The Contractor agrees to render Cloud Related IT Professional Services during normal working hours, unless otherwise agreed to by the Contractor and the ordering activity.

(3) The ordering activity should include the criteria for satisfactory completion for each task in the Statement of Work or Delivery Order. Cloud Related IT Professional Services shall be completed in a good and workmanlike manner.

(4) Any Contractor travel required in the performance of Cloud Related IT Professional 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. All travel will be agreed upon with the client prior to the Contractor's travel.

d. INSPECTION OF SERVICES

Inspection of services is in accordance with 552.212-4 CONTRACT TERMS AND CONDITIONS - COMMERCIAL ITEMS (JAN 2017) (DEVIATION - FEB 2007) (DEVIATION - FEB 2018) for Firm-Fixed Price orders; or GSAR 552.212-4 CONTRACT TERMS AND CONDITIONS-COMMERCIAL ITEMS (JAN 2017) (DEVIATION - FEB 2018)

(ALTERNATE I - JAN 2017) (DEVIATION - FEB 2007) for Time-and-Materials and Labor- Hour Contracts orders placed under this contract.

e. 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 (MAY 2014) Rights in Data- General, may apply.

The Contractor shall comply with contract clause (52.204-21) to the Federal Acquisition Regulation (FAR) for the basic safeguarding of contractor information systems that process, store, or transmit Federal data received by the contract in performance of the contract. This includes contract documents and all information generated in the performance of the contract.

f. RESPONSIBILITIES OF THE ORDERING ACTIVITY

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

g. INDEPENDENT CONTRACTOR

All Cloud Computing 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.

h. ORGANIZATIONAL CONFLICTS OF INTEREST

(1) 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.

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.

i. INVOICES

The Contractor, upon completion of the work ordered, shall submit invoices for Cloud Computing 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 IT professional services performed during the preceding month.

j. PAYMENTS

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. Payments shall be made in accordance with:

For orders that are NOT time-and-materials/labor hours (fixed price applicable).

GSAR 552.212-4 CONTRACT TERMS AND CONDITIONS-COMMERCIAL ITEMS
(JAN 2017) (DEVIATION - FEB 2007) (DEVIATION - FEB 2018)

For orders that are time-and-materials/labor hours.

GSAR 552.212-4 CONTRACT TERMS AND CONDITIONS-COMMERCIAL ITEMS
(JAN 2017) (DEVIATION - FEB 2018) (ALTERNATE I - JAN 2017) (DEVIATION - FEB 2007)

FAR 52.216-31 (Feb 2007) Time-and Materials/Labor-Hour Proposal Requirements-Commercial Item Acquisition.
As prescribed in 16.601(f)(3), insert the following provision:

(1) The Government contemplates award of a Time-and-Materials or Labor-Hour type of contract resulting from this solicitation.

(2) 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 (i) The offeror; (ii) Subcontractors; and/or (iii) Divisions, subsidiaries, or affiliates of the offeror under a common control.

k. RESUMES

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

l. 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.

m. DESCRIPTION OF CLOUD COMPUTING LABOR HOURS AND PRICING



(1) The Contractor shall provide a description of each type of Cloud Computing Professional Service offered under Special Item Numbers 518210C and it should be presented in the same manner as the Contractor sells to its commercial and other ordering activity customers. If the Contractor is proposing hourly rates, a description of all corresponding commercial job titles (labor categories) for those individuals who will perform the service should be provided.

(2) Pricing for all Cloud Computing IT Professional Services shall be in accordance with the Contractor's customary commercial practices; e.g., hourly rates, minimum general experience and minimum education.



518210C CLOUD RELATED IT PROFESSIONAL SERVICES LABOR CATEGORY DESCRIPTIONS

Cloud Architect

Functional Responsibility: Designs cloud infrastructure, virtual private cloud, virtual private network, relational database services, auto scaling, and compute resources to meet customers' requirements. Provides expertise in high availability, contingency planning, and automated provisioning. Responsible for cloud management and monitoring. Designs solutions for various deployment models (Private, Public, Community and Hybrid) and service models including Infrastructure as a Service (IaaS), Platform as a service (PaaS), Software as a Service (SaaS) and emerging cloud services to optimize the essential characteristics of cloud computing. Advices on storage and security solutions to securely store data in multi-tenancy environments. Collaborates with enterprise architecture team and other stakeholders to determine enterprise tools, technologies and processes. Establishes corporate cloud computing architecture policies and standards in compliance with appropriate security levels and governance in accordance with best practices prescribes by the National Institute of Standards and Technology (NIST), Federal Information Security Management Act (FISMA), Federal Information Processing Standard (FIPS), Office of Management and Budget (OMB) and Federal Risk and Authorization Management Program (FedRAMP). Responsible for delivering an end-to-end cloud architecture solution across all domains.

Education Requirements: Bachelor's degree in Computer Science or equivalent field

Minimum/General Experience: Seven years of experience

Cloud Engineer

Functional Responsibility: Provides direction on designing cloud infrastructure capable of supporting a number of applications in the cloud with an emphasis on scalability, automation, performance and availability. Oversees the installation, provisioning, configuration, operation and maintenance of required hardware and software related to cloud computing infrastructure components. Provides guidance and sets standards on migrating internal and external organizational projects to a cloud computing environment including migration of existing data centers to a cloud computing environment. Provides expertise on cloud implementations and researches emerging trends and technologies related to cloud engineering. Implements prescribed solutions for various deployment models (Private, Public, Community and Hybrid) and delivery models including Infrastructure as a Service (IaaS), Platform as a service (PaaS), and Software as a Service (SaaS). Collaborates with security analysts, architects and engineers to define and implement the best solutions for the technical infrastructure layer in a cloud environment.

Education Requirements: Bachelor's degree in Computer Science or equivalent field

Minimum/General Experience: Seven years of experience

Cloud Operations

Functional Responsibility: Responsible for configuring cloud environments that are scalable and reliable. Performs tasks including installation, configuration, and maintenance under the direction of the cloud engineering team. Collaborates with engineering, development and quality assurance teams to develop guidelines on automated monitoring and alerting protocols. Works with other infrastructure and engineering teams to identify emerging trends and technologies related to cloud engineering. Prepares and updates documentation relating to organizational standards and procedures pertaining to the cloud. Monitors and troubleshoots any cloud operational issues. Maintain logs and records related to the cloud environment.

Education Requirements: Bachelor's degree in Computer Science or equivalent field

Minimum/General Experience: Three years of experience

518210C CLOUD IT PROFESSIONAL SERVICES PRICE LIST

GOVERNMENT SITE RATES w/IFF

Ref.	GSA IT Labor Category	Year 1	Year 2	Year 3	Year 4	Year 5
1	Cloud Architect	161.60	164.35	167.14	169.98	172.87
2	Cloud Engineer	149.62	152.17	154.75	157.38	160.06
3	Cloud Operations	115.75	117.72	119.72	121.75	123.82

CONTRACTOR SITE RATES w/IFF

Ref.	GSA IT Labor Category	Year 1	Year 2	Year 3	Year 4	Year 5
1	Cloud Architect	177.76	180.78	183.86	186.98	190.16
2	Cloud Engineer	164.58	167.38	170.23	173.12	176.06
3	Cloud Operations	127.32	129.49	131.69	133.93	136.20

518210C CLOUD COMPUTING SERVICES PRICE LIST

DCI is an Amazon Web Services (AWS) consulting partner, AWS professional services provider, AWS authorized government solution provider, AWS authorized channel reseller in public, hybrid, and government community cloud deployment models.

DCI's AWS cloud services schedule pricing is always current. Our schedule pricing is automatically updated whenever AWS updates their prices via the AWS Price List Service. Discounted prices are also available in near-real-time to our customers through our billing API, which automatically applies our GSA discounts to each line item in the AWS Cost and Usage Report published to AWS S3 daily.

This cloud service product pricing is for the GSA Schedule IT-70 Multiple Award Schedule (MAS). All prices are in U.S. Dollars and include the 0.75% Industrial Funding Fee (IFF).

The most complete and up to date version of Development Consultants Incorporated GSA Schedule IT-70 518210C pricing information is available at <https://www.devconinc.com/pricing/GSA-IT-Schedule-70/cloud/>

The Development Consultants Incorporated AWS Customer Agreement is available at <https://www.devconinc.com/agreement>.

AWS updates services, regions, availability zones, and pricing frequently. The latest regional service information can be found here: <https://aws.amazon.com/about-aws/global-infrastructure/regional-product-services/>

Prices may be subject to the additional terms included in the pricing pages on <http://aws.amazon.com>.



Order Level Materials (OLM)

Order-Level Materials (OLMs) are supplies and/or services acquired in direct support of an individual task or delivery order placed against a Federal Supply Schedule (FSS) contract or FSS blanket purchase agreement (BPA). OLMs are not defined, priced, or awarded at the FSS contract level. They are unknown before a task or delivery order is placed against the FSS contract or FSS BPA.

OLMs are only authorized for inclusion at the order level under a Time-and-Materials (T&M) or Labor-Hour (LH) Contract Line Item Number (CLIN) and are subject to a Not To Exceed (NTE) ceiling price. OLMs include direct materials, subcontracts for supplies and incidental services for which there is not a labor category specified in the FSS contract, other direct costs (separate from those under ODC SINs), and indirect costs. OLMs are purchased under the authority of the FSS Program and are not “open market items.”

Items awarded under ancillary supplies/services or other direct cost (ODC) SINs are not OLMs. These items are defined, priced, and awarded at the FSS contract level, whereas OLMs are unknown before an order is placed. Ancillary supplies/services and ODC SINs are for use under all order type CLINs (Fixed-Price (FP), T&M, and LH), whereas the Order-Level Materials SIN is only authorized for use under T&M and LH order CLINs.

The Order-Level Materials SIN is only authorized for use in direct support of another awarded SIN. Price analysis for OLMs is not conducted when awarding the FSS contract or FSS BPA; therefore, GSAR 538.270 and 538.271 do not apply to OLMs. OLMs are defined and priced at the ordering activity level in accordance with GSAR clause 552.238-82 Special Ordering Procedures for the Acquisition of Order-Level Materials. Prices for items provided under the Order-Level Materials SIN must be inclusive of the Industrial Funding Fee (IFF). The cumulative value of OLMs in an individual task or delivery order cannot exceed 33.33% of the total value of the order.

The Maximum Order Threshold for the OLM SINs is \$100,000.



BEST VALUE
BLANKET PURCHASE AGREEMENT
FEDERAL SUPPLY SCHEDULE

(Insert Customer Name)

In the spirit of the Federal Acquisition Streamlining Act (ordering activity) and (Contractor) enter into a cooperative agreement to further reduce the administrative costs of acquiring commercial items from the General Services Administration (GSA) Federal Supply Schedule Contract(s) _____.

Federal Supply Schedule contract BPAs eliminate contracting and open market costs such as: search for sources; the development of technical documents, solicitations and the evaluation of offers. Teaming Arrangements are permitted with Federal Acquisition Schedule Contractors in accordance with Federal Acquisition Regulation (FAR) 9.6.

This BPA will further decrease costs, reduce paperwork, and save time by eliminating the need for repetitive, individual purchases from the schedule contract. The end result is to create a purchasing mechanism for the ordering activity that works better and costs less.

Signatures

Ordering Activity Date Contractor Date
BPA NUMBER _____

(CUSTOMER NAME)
BLANKET PURCHASE AGREEMENT

Pursuant to GSA Federal Supply Schedule Contract Number(s) _____, Blanket Purchase Agreements, the Contractor agrees to the following terms of a Blanket Purchase Agreement (BPA) EXCLUSIVELY WITH (ordering activity):

(1) The following contract items can be ordered under this BPA. All orders placed against this BPA are subject to the terms and conditions of the contract, except as noted below:

MODEL NUMBER/PART NUMBER *SPECIAL BPA DISCOUNT/PRICE

(2) Delivery: DESTINATION DELIVERY SCHEDULES/DATES

(3) The ordering activity estimates, but does not guarantee, that the volume of purchases through this agreement will be _____.

(4) This BPA does not obligate any funds.

(5) This BPA expires on _____ or at the end of the contract period, whichever is earlier.

(6) The following office(s) is hereby authorized to place orders under this BPA:

OFFICE POINT OF CONTACT



- (7) Orders will be placed against this BPA via Electronic Data Interchange (EDI), FAX, or paper.
- (8) Unless otherwise agreed to, all deliveries under this BPA must be accompanied by delivery tickets or sales slips that must contain the following information as a minimum:
- (a) Name of Contractor
 - (b) Contract Number
 - (c) BPA Number
 - (d) Model Number or National Stock Number (NSN)
 - (e) Purchase Order Number
 - (f) Date of Purchase
 - (g) Quantity, Unit Price, and Extension of Each Item (unit prices and extensions need not be shown when incompatible with the use of automated systems; provided, that the invoice is itemized to show the information)
 - (h) Date of Shipment.
- (9) The requirements of a proper invoice are specified in the Federal Supply Schedule contract. Invoices will be submitted to the address specified within the purchase order transmission issued against this BPA.
- (10) The terms and conditions included in this BPA apply to all purchases made pursuant to it. In the event of an inconsistency between the provisions of this BPA and the Contractors invoice, the provisions of this BPA will take precedence.