AUTHORIZED FEDERAL SUPPLY SERVICE
INFORMATION TECHNOLOGY SCHEDULE PRICELIST
GENERAL PURPOSE COMMERCIAL INFORMATION TECHNOLOGY
EQUIPMENT, SOFTWARE AND SERVICES

Special Item No. 132-40	Cloud Computing Services
Special Item No. 132-51	Information Technology Professional Services
Special Item No. 132-52	Electronic Commerce Services
Special Item No. 132-56	Health Information Technology Services

SIN 132-40 Cloud Computing Services
FPDS Code D304   Telecommunications and Transmission Services

SIN 132-51 Information Technology Professional Services
FPDS Code D302   IT Systems Development Services
FPDS Code D306   IT Systems Analysis Services
FPDS Code D307   Automated Information Systems Design/Integration Services
FPDS Code D308   Programming Services
FPDS Code D310   IT Backup and Security Services
FPDS Code D311   IT Data Conversion Services
FPDS Code D316   IT Network Management Services
FPDS Code D399   Other Information Technology Services, NEC

Note 1: All non-professional labor categories must be incidental to and used solely to support hardware, software and/or professional services, and cannot be purchased separately.

Note 2: Offerors and Agencies are advised that the Group 70 – Information Technology Schedule is not to be used as a means to procure services which properly fall under the Brooks Act. These services include, but are not limited to, architectural, engineering, mapping, cartographic production, remote sensing, geographic information systems, and related services. FAR 36.6 distinguishes between mapping services of an A/E nature and mapping services which are not connected nor incidental to the traditionally accepted A/E Services.

Note 3: This solicitation is not intended to solicit for the reselling of IT Professional Services, except for the provision of implementation, maintenance, integration, or training services in direct support of a product. Under such circumstances the services must be performed by the publisher or manufacturer or one of their authorized agents.

SIN 132-52 Electronic Commerce Services
FPDS Code D304   Telecommunications and Transmission Services – E-Mail Services
FPDS Code D399   Other Data Transmission Services, Not Elsewhere Classified – Except "Voice" and Pager Services

SIN 132-56 Health Information Technology Services
FPDS Code D302   IT Systems Development Services
FPDS Code D306   IT Systems Analysis Services
FPDS Code D307   Automated Information Systems Design/Integration Services
FPDS Code D308   Programming Services
FPDS Code D310   IT Backup and Security Services
FPDS Code D311   IT Data Conversion Services
FPDS Code D316   IT Network Management Services
FPDS Code D399   Other Information Technology Services, NEC

Products and ordering information in this Authorized FSS Information Technology Schedule Pricelist are also available on the GSA Advantage! System. Agencies can browse GSA Advantage! by accessing the Federal Supply Service's Home Page via the Internet at http://www.gsa.gov

Corporate Overview/Capabilities

Smartronix is a U.S.-owned global professional solutions provider specializing in NetOps, Cyber Security, Cloud Computing, Enterprise Software Solutions, Mission-Focused Engineering, and Health IT. Smartronix is headquartered in Hollywood, Maryland; and has operating offices in Virginia, Florida, Alabama, Georgia, Texas, Arizona, and Hawaii. Smartronix' corporate office maintains a TOP SECRET Facility clearance, has a dedicated and experienced Facility Security Officer, and has earned a Superior DSS rating the past four years.

Smartronix is an industry leader in delivering innovative, secure, and agile technology solutions. An overview of our overall corporate capabilities is provided in Figure 1. Smartronix has delivered landmark, award-winning solutions such as Treasury.gov and Recovery.gov, the first Web systems hosted on the public Cloud. Additionally, the company was recognized as the Best Technology Consulting Firm to Work For by Vault, an Employer of Choice by Northern Virginia Family Service, and ranked as one of the nation's fastest-growing companies by multiple sources.

Corporate Qualifications Summary

Sustained excellence in providing comprehensive, professional information technology and engineering solutions demonstrated by:

- ISO 9001:2008 Certified
- ISO/IEC 20000-1:2011 Certified
- CMMI Maturity Level 3
- Fully Qualified Navy Certification Agent
- GSA Alliant GWAC Prime
- NITAAC CIO-SP3 GWAC Prime
- Amazon Premier Consulting Partner
- Microsoft Gold Partner
- Dell Professional Services Provider
- Oracle Gold Partner
- Panasonic Toughbook Premier Partner
- VMware Solutions Provider
- HP Certified Re-seller

Smartronix is a Microsoft Certified Gold Partner; and we are at the forefront of Federal Government Cloud computing and one of only 20 (eight U.S. based) Amazon Web Services (AWS) premier consulting partners. Smartronix successfully migrated and continues to operate Cloud-based enterprise solutions providing high-performance Web Content Management System supporting the Treasury.Gov website. Our efforts have enabled multiple Federal agencies to transform existing infrastructures into cost-effective, sustainable environments aligned with current and future business needs.

Smartronix' past performance demonstrates how we have provided innovative and affordable industry-leading solutions. We have extensive experience developing enterprise applications solutions; providing business intelligence, data management, and data warehousing solutions; designing mobile and big data management applications; defending networks against cyber attacks; architecting open Government and commercial Cloud computing initiatives; and engineering irregular warfare solutions.

During our 20-year history, Smartronix has built a worldwide team that possesses innovative technical expertise in the development of a wide range of technological and management solutions. Smartronix success and exceptional growth is based largely on our ability to quickly adapt and respond to our customers' needs, providing not only the technical expertise needed to deliver essential solutions, but also the mature management and leadership required to support and sustain large initiatives. As we have matured as a corporation, we have continued to apply standard program management philosophies. We have also made investments into or corporate infrastructure including the implementation of leading technology tools for program finance and cost accounting, including the certification or our systems to support corporate level and program management efforts through CPSR approval.

Smartronix is more than a corporation of exceptional people and advanced technology—we are a company that is committed to delivering sensible solutions to customer-specific challenges. We are true to our vision "to be a recognized leader for technical and business solutions, and committed to employee growth and customer satisfaction." We accomplish this vision while holding fast to our corporate values of: Integrity, Commitment, Trust, Innovation, Efficiency, and Professional and Social Contribution.

Smartronix Corporate Capabilities

Cloud Computing

- External Web Presence
- Internal Collaborative Portal
- Data Hosting Services
- Data Visualization Services
- Data Analytic Services
- Managed Services
- Strategy Consulting
- Infrastructure Design
- Migration
- Security
- Hybrid Architectures

NetOps

- Network Architecture, Operations and Management
- Messaging & Directory Services
- Server Consolidation & Management / Storage Technologies
- Continuity of Operations / Disaster Recovery
- Policy and Process Development
- Network and Systems Migrations

Cyber Security

- Vulnerability Assessments and Penetration Testing
- Incident Response and Remediation
- Consulting and Training
- Continuous Monitoring and Advanced Hunting
- Automated Security Compliance and Reporting
- Patch Management
- PKI Architecture and Management
- Host Hardening and Application Security
- Certification and Accreditation

Software Development

- Enterprise Application Development and Integration
- Business Intelligence, Knowledge Management, Data Warehousing and Logistics Modernization
- Enterprise Messaging, Collaboration and Content Management
- Server and Application Virtualization
- Service-Oriented Architecture Design and Development
- Geospatial Technology Integration

Health IT

- Medical Information Systems RDT&E
- Datacenter Solutions
- Cloud Solutions
- Enterprise Virtualization
- Systems Modeling & Simulation
- Medical Enterprise Software
- Health Data Management, Assurance, and Informatics

Mission-Focused Engineering

- Command and Control Systems
- Electronic Systems Design
- Aeronautical Systems
- Big Data Management
- Business Intelligence
- Integrated Communications and Sensor Systems

Figure 1. Overview of Smartronix Corporate Capabilities.

SMARTRONIX, INC. PROFESSIONAL SERVICES

Smartronix offers the following services to its clients:

Network Architecture Engineering • Design • Installation • Integration • Transition • Operation	Enterprise Router Management (Cisco, Nortel, Enterasys); Enterprise Load Balancers (F5, Foundry, Alteon); Enterprise DNS Support (Sun and Microsoft); Enterprise Firewall Support (NA Gauntlet, CA Raptor, Netscreen, Fortinet, Cisco); Enterprise Intrusion Detection Support (ISS Real Secure, CA NetProwler, Cisco NetRanger); Enterprise VPN Support (TimeStep/Alcatel, Cisco, Fortinet, F5); Enterprise Network Management (HP Openview, Cabletron Spectrum); Enterprise Network Capacity/Performance (Concord Network Health); Enterprise Call Center Support (Remedy); Enterprise Network Data Storage Solutions (Veritas, Computer Associates, Dell, EMC, NetApp, ADIC – Autolibrary, SAN, NAS, Brocade, Cisco, HP); Wireless Wide, Local Area Networks, and Mesh (Cisco, Fortress); Enterprise Virtual Infrastructure (Vmware, Microsoft); Enterprise Virtual Applications (Altiris, Microsoft); Enterprise Disaster Recovery and COOP Operations.
Information Architecture Engineering • Design • Installation • Integration • Transition • Operation	Enterprise Network Operating System (Microsoft, Novell); Enterprise Messaging Architecture (Microsoft Exchange, Jabbar, LCS/OCS); Enterprise Directory Planning (Windows Active Directory, NDS); Enterprise PKI Implementation (DoD PKI, Tactical PKI); Enterprise Systems Management (Microsoft, Novadigm, Unix, Linux, Cisco); Enterprise Support Systems (anti-virus, proxy/cache, etc.); Enterprise Life Cycle Management and Backup Architectures.
Health Information Technology	Health Data Management; Enterprise Software Development in the Healthcare Arena; Enterprise Technical Solutions for Health Data Management; Health Data Analysis and Support; Automated tools to analyze Patient and Provider files; Geospatial;
Software Engineering Services	Enterprise Collaborative and Content Management Applications (Oracle Portal, Microsoft SharePoint); Custom Web-Enabled/Database Driven Solutions (Web applications using Oracle/Microsoft databases as back end; three tiered web applications - presentation, business, database); Enterprise and Desktop Office Solutions (Microsoft Office SharePoint Server (MOSS)/Windows SharePoint Services (WSS)) Third Party Add-ons (Microsoft (e.g., MOSS Administrative Tools), Deltek (e.g., Extended Database Reporting)) Data Warehousing (Data Mining, Data Analysis, Data Integration, Database Programming) Software Application Development (Microsoft ASP.NET, MFC/C++, C#, Visual Basic/.NET, Java, ColdFusion (CFMX), COM/DCOM, XML, HTML, DHTML, XHTML) - Examples: developed automated publishing systems to produce interactive electronic technical manuals (IETMs) for both CD-ROMs and web environment, network security mass aggregation tools, GUI-based data extraction tools, etc. Embedded Programming (Unix/Solaris/VxWorks/VME/C - real-time and non-real-time test tools for a combat identification system (simulator, stimulator, data extraction/ reduction/analysis); Intel x86/8051, PIC, Z80 assembly language)
Hardware Engineering Services	Microprocessor/Microcontroller Based Design, Digital/Analog Design, Printed Circuit Board Design, Real-time Embedded Systems, Programmable Logic Design (CPLDs, PLDs, FPGAs), Rapid Prototype Development (Specialize in embedded processor, firmware, digital based systems; Experienced with popular interfaces and protocols (including RS-232, RS-422, MIL-STD-1553, PCMCIA, PCIe, USB, EISA, NTDS, ETHERNET, PoE, IEEE-488, X.25); Experienced in the design of multi-layer, density printed circuit boards).
Hardware Engineering Products	Intelligent Data Recorders (Temperature, Humidity, Light, Impact and Vibration (3-axis solid state accelerometers)); Windows-based Software for downloading and analyzing data on PC; Embedded processor technology) Rugged Laptop Systems (Panasonic Value Added Reseller; Solutions based on Panasonic Toughbook Series; Integrate PCMCIA cards and electronic subassemblies into custom "stress relief"; Developed removable hard drives for CF-25 and CF-27 Toughbook) Data Communication Testers (Developed MIL-STD 1553/Ethernet/RS-232/audio tester for rugged laptop system; Handheld, Palm PDA-based, Ethernet test tool).
Systems Engineering Services	Functional Analysis, System Administration Support, Database Management, Software Evaluation Analysis, Program/System Review, Logistics Support Planning, Document Review, and Test Support.
Acquisition/ Procurement Services	System Requirement Analysis, System Configuration and Design, Software/Hardware Procurement, System Component Integration and Shipping, Sole Source Procurement Support through SBA 8(a) Program, Acquisition Research (Best Value), ID/IQ Hardware Contract to supply COTS hardware, software, and peripherals to various DoD customers.

SPECIAL NOTICE TO AGENCIES:
Small Business Participation

SBA strongly supports the participation of small business concerns in the Federal Supply Schedules Program. To enhance Small Business Participation SBA policy allows agencies to include in their procurement base and goals, the dollar value of orders expected to be placed against the Federal Supply Schedules, and to report accomplishments against these goals.

For orders exceeding the micro purchase threshold, FAR 8.404 requires agencies to consider the catalogs/pricelists of at least three schedule contractors or consider reasonably available information by using the GSA Advantage!™ on-line shopping service (www.gsaadvantage.gov). The catalogs/pricelists, GSA Advantage!™ and the Federal Supply Service Home Page (www.gsa.gov) contains information on a broad array of products and services offered by small business concerns.

This information should be used as a tool to assist ordering activities in meeting or exceeding established small business goals. It should also be used as a tool to assist in including small, small disadvantaged, and women-owned small businesses among those considered when selecting pricelists for a best value determination.

For orders exceeding the micro purchase threshold, customers are to give preference to small business concerns when two or more items at the same delivered price will satisfy their requirement.

1.   **Geographic Scope of Contract:**

Domestic delivery is delivery within the 48 contiguous states, Alaska, Hawaii, Puerto Rico, Washington, DC, and U.S. Territories. Domestic delivery also includes a port or consolidation point, within the aforementioned areas, for orders received from overseas activities.

Overseas delivery is delivery to points outside of the 48 contiguous states, Washington, DC, Alaska, Hawaii, Puerto Rico, and U.S. Territories.

Offerors are requested to check one of the following boxes:

    [X]   The Geographic Scope of Contract will be domestic and overseas delivery.
    [ ]   The Geographic Scope of Contract will be overseas delivery only.
    [ ]   The Geographic Scope of Contract will be domestic delivery only.

2.   **Contractor's Ordering Address and Payment Information:**

Ordering Address: Smartronix, Inc.
                  44150 Smartronix Way
                  Hollywood, MD 20636
                  Attention: Melinda Armsworthy
                  Phone: (301) 373-6000
                  Fax: (301) 373-7176

Payment Address: Smartronix, Inc.
                  P.O. Box 37608
                  Baltimore, MD 21297-3608
                  Attention: Accounts Receivable

Contractors are required to accept credit cards for payments equal to or less than the micro-purchase threshold for oral or written delivery orders. Smartronix, Inc. will accept Credit cards for payment above

the micro-purchase threshold. In addition, bank account information for wire transfer payments will be shown on the invoice.

The following telephone number(s) can be used by ordering agencies to obtain technical and/or ordering assistance:

Ordering Assistance: Melinda Armsworthy; marmsworthy@smartronix.com ;
(301) 373-6000
Technical Assistance: Rick Schutz; fschutz@smartronix.com ; (301) 373-6000
For Fax Ordering: Melinda Armsworthy; (301) 373-7176

3. Liability for Injury or Damage:

The Contractor shall not be liable for any injury to ordering activity personnel or damage to ordering activity property arising from the use of equipment maintained by the Contractor, unless such injury or damage is due to the fault or negligence of the Contractor.

4. Statistical Data for Government Ordering Office Completion of Standard Form 279:

Block 9: Order/Modification Under Federal Schedule
Block 16: Data Universal Numbering System (DUNS): 96-509-1606
Block 30: Type of Contractor – Large Business
Block 31: Woman-Owned Small Business - No
Block 36: Contractor's Taxpayer Identification Number (TIN) - 52-1922012

4a. CAGE Code: 03MT8

4b. Smartronix is active in the System for Award Management (SAM)

5. FOB: Destination CONUS

6. Delivery Schedule:

a. **Time of Delivery:** Smartronix, Inc. shall deliver to destination within the number of calendar days after receipt of order (ARO), as set forth below:

Special Item Number (SIN)	Delivery Time(s) (Days ARO)
132-40	As negotiated with ordering agency
132-51	As negotiated with ordering agency
132-52	As negotiated with ordering agency
132-56	As negotiated with ordering agency

b. **Urgent Requirements:** When the Federal Supply Schedule contract delivery period does not meet the bona fide urgent delivery requirements of an ordering activity, ordering activities 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 activity, 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.

7. Discounts: Prices shown are NET Prices; Basic Discounts have been deducted.

Prompt Payment:	1% / 20 Days; Net 30 Days
Quantity:	None
Dollar Volume:	None
Government Educational Institutions:	Same Discounts as all other Government Customers
Other:	None

8. Trade Agreement Act of 1979, as Amended:

All items are U.S. made end products, designated country end products, Caribbean Basin country end products, Canadian end products, or Mexican end products as defined in the Trade Agreements Act of 1979, as amended.

9. Statement Concerning Availability of Export Packing:

All products are FOB CONUS, overseas shipments are not accepted.

10. Minimum Order: The minimum dollar value of orders to be issued is: $100.00

11. Maximum Order: (All dollar amounts are exclusive of any discount for prompt payment.)

The Maximum Order value for the following Special Item Numbers (SINs) is $500,000:

Special Item Number 132-40   Cloud Computing Services
Special Item Number 132-51   Information Technology (IT) Professional Service
Special Item Number 132-52   Electronic Commerce Services
Special Item Number 132-56   Health Information Technology (IT) Services

12. Ordering Procedures for Federal Supply Schedule Contracts:

Ordering activities shall use the ordering procedures of Federal Acquisition Regulation (FAR) 8.405 when placing an order or establishing a BPA for supplies or services. These procedures apply to all schedules.

   a. FAR 8.405-1 Ordering procedures for supplies, and services not requiring a statement of work.

   b. FAR 8.405-2 Ordering procedures for services requiring a statement or of work.

13. Federal Information Technology / Telecommunication Standards Requirements:

Ordering activities acquiring products from this Schedule must comply with the provisions of the Federal Standards Program, as appropriate (reference: NIST Federal Standards Index). Inquiries to determine whether or not specific products listed herein comply with Federal Information Processing Standards (FIPS) or Federal Telecommunication Standards (FED-STDS), which are cited by ordering activities, shall be responded to promptly by the Contractor.

13.1 Federal Information Processing Standards Publications (FIP PUBS):

Information Technology products under this Schedule that do not conform to Federal Information Processing Standards (FIPS) should not be acquired unless a waiver has been granted in accordance with the applicable "FIPS Publication." Federal Information Processing Standards Publications (FIPS PUBS) are issued by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST), pursuant to National Security Act. Information concerning their availability and applicability should be obtained from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161. FIPS PUBS include voluntary standards when these are adopted for Federal use. Individual orders for FIPS PUBS should be referred to the NTIS Sales Office, and orders for subscription service

should be referred to the NTIS Subscription Officer, both at the above address, or telephone number (703) 487-4650.

13.2 Federal Telecommunication Standards (FED-STDS):

Telecommunication products under this Schedule that do not conform to Federal Telecommunication Standards (FED-STDS) should not be acquired unless a waiver has been granted in accordance with the applicable "FED-STD." Federal Telecommunication Standards are issued by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST), pursuant to National Security Act. Ordering information and information concerning the availability of FED-STDS should be obtained from the GSA, Federal Supply Service, Specification Section, 470 East L'Enfant Plaza, Suite 8100, SW, Washington, DC 20407, telephone number (202)619-8925. Please include a self-addressed mailing label when requesting information by mail. Information concerning their applicability can be obtained by writing or calling the U.S. Department of Commerce, National Institute of Standards and Technology, Gaithersburg, MD 20899, telephone number (301)975-2833.

14. Contractor Tasks / Special Requirements (C-FSS-370) (NOV 2001):

a. **Security Clearances:** The Contractor may be required to obtain/possess varying levels of security clearances in the performance of orders issued under this contract. All costs associated with obtaining/possessing such security clearances should be factored into the price offered under the Multiple Award Schedule.

b. **Travel:** The Contractor may be required to travel in performance of orders issued under this contract. Allowable travel and per diem charges are governed by Pub .L. 99-234 and FAR Part 31, and are reimbursable by the ordering agency or can be priced as a fixed price item on orders placed under the Multiple Award Schedule. The Industrial Funding Fee does NOT apply to travel and per diem charges.

c. **Certifications, Licenses and Accreditations:** As a commercial practice, the Contractor may be required to obtain/possess any variety of certifications, licenses and accreditations for specific FSC/service code classifications offered. All costs associated with obtaining/ possessing such certifications, licenses and accreditations should be factored into the price offered under the Multiple Award Schedule program.

d. **Insurance:** As a commercial practice, the Contractor may be required to obtain/possess insurance coverage for specific FSC/service code classifications offered. All costs associated with obtaining/possessing such insurance should be factored into the price offered under the Multiple Award Schedule program.

e. **Personnel:** The Contractor may be required to provide key personnel, resumes or skill category descriptions in the performance of orders issued under this contract. Ordering activities may require agency approval of additions or replacements to key personnel.

f. **Organizational Conflicts of Interest:** Where there may be an organizational conflict of interest as determined by the ordering agency, the Contractor's participation in such order may be restricted in accordance with FAR Part 9.5.

g. **Documentation/Standards:** The Contractor may be requested to provide products or services in accordance with rules, regulations, OMB orders, standards and documentation as specified by the agency's order.

h. **Data/Deliverable Requirements:** Any required data/deliverables at the ordering level will be as specified or negotiated in the agency's order.

i. **Government-Furnished Property:** As specified by the agency's order, the Government may provide property, equipment, materials or resources as necessary.

j. **Availability of Funds:** Many Government agencies' operating funds are appropriated for a specific fiscal year. Funds may not be presently available for any orders placed under the contract or any option year. The Government's obligation on orders placed under this contract is contingent upon the availability of appropriated funds from which payment for ordering purposes can be made. No legal liability on the part of the Government for any payment may arise until funds are available to the ordering Contracting Officer.

15. Contract Administration for Ordering Activities:

Any ordering activity, with respect to any one or more delivery orders placed by it under this contract, may exercise the same rights of termination as might the GSA Contracting Officer under provisions of FAR 52.212-4, paragraphs (l) Termination for the ordering activity's convenience, and (m) Termination for Cause (See C.1.)

16. GSA Advantage!

GSA Advantage! is an on-line, interactive electronic information and ordering system that provides on-line access to vendors' schedule prices with ordering information. GSA Advantage! will allow the user to perform various searches across all contracts including, but not limited to:

1. Manufacturer;
2. Manufacturer's Part Number; and
3. Product categories.

Agencies can browse GSA Advantage! by accessing the Internet World Wide Web utilizing a browser (ex.: NetScape). The Internet address is www.gsaadvantage.gov.

17. Purchase of Open Market Items:

NOTE: Open Market Items are also known as incidental items, noncontract items, non-Schedule items, and items not on a Federal Supply Schedule contract. ODCs (Other Direct Costs) are not part of this contract and should be treated as open market purchases. Ordering Activities procuring open market items must follow FAR 8.402(f).

For administrative convenience, an ordering activity contracting officer may add items not on the Federal Supply Multiple Award Schedule (MAS) -- referred to as open market items -- to a Federal Supply Schedule blanket purchase agreement (BPA) or an individual task or delivery order, **only if**-

1. All applicable acquisition regulations pertaining to the purchase of the items not on the Federal Supply Schedule have been followed (e.g., publicizing (Part 5), competition requirements (Part 6), acquisition of commercial items (Part 12), contracting methods (Parts 13, 14, and 15), and small business programs (Part 19));

2. The ordering activity contracting officer has determined the price for the items not on the Federal Supply Schedule is fair and reasonable;

3. The items are clearly labeled on the order as items not on the Federal Supply Schedule; and

4. All clauses applicable to items not on the Federal Supply Schedule are included in the order.

18. Contractor Commitments, Warranties and Representations:

a. For the purpose of this contract, commitments, warranties and representations include, in addition to those agreed to for the entire schedule contract:

1. Time of delivery/installation quotations for individual orders;

2. Technical representations and/or warranties of products concerning performance, total system performance and/or configuration, physical, design and/or functional characteristics and

capabilities of a product/equipment/ service/software package submitted in response to requirements which result in orders under this schedule contract.

3. Any representations and/or warranties concerning the products made in any literature, description, drawings and/or specifications furnished by the Contractor.

b. The above is not intended to encompass items not currently covered by the GSA Schedule contract.

19. Overseas Activities:

The terms and conditions of this contract shall apply to all orders for installation, maintenance and repair of equipment in areas listed in the pricelist outside the 48 contiguous states and the District of Columbia, except as indicated below:

> **Worldwide or Overseas locations are subject to negotiation, utilizing GSA schedule rates as base rates to negotiate a premium to compensate employees for entering "High Risk" duty areas or countries. All shipping, logistics and support issues will be negotiated with the Ordering Agency.**

Upon request of the Contractor, the ordering activity may provide the Contractor with logistics support, as available, in accordance with all applicable ordering activity regulations. Such ordering activity support will be provided on a reimbursable basis, and will only be provided to the Contractor's technical personnel whose services are exclusively required for the fulfillment of the terms and conditions of this contract.

20. Blanket Purchase Agreements (BPAs):

The use of BPA's under any schedule contract to fill repetitive needs for supplies or services is allowable. BPA's may be established with one or more schedule contractors. The number of BPA's to be established is within the discretion of the ordering activity establishing the BPA and should be based on a strategy that is expected to maximize the effectiveness of the BPA(s). Ordering activities shall follow FAR 8.405-3 when creating and implementing BPAs.

21. Contractor Team Arrangements:

Contractors participating in contractor team arrangements must abide by all terms and conditions of their respective contracts. This includes compliance with Clauses 552.238-74; Industrial Funding Fee and Sales Reporting, i.e., each contractor (team member) must report sales and remit the IFF for all products and services provided under its individual contract.

22. Installation, Deinstallation, Reinstallation:

The Davis-Bacon Act (40 U.S.C. 276a-276a-7) provides that contracts in excess of $2,000 to which the United States or the District of Columbia is a party for construction, alteration, or repair (including painting and decorating) of public buildings or public works with the United States, shall contain a clause that no laborer or mechanic employed directly upon the site of the work shall receive less than the prevailing wage rates as determined by the Secretary of Labor. The requirements of the Davis-Bacon Act do not apply if the construction work is incidental to the furnishing of supplies, equipment, or services. For example, the requirements do not apply to simple installation or alteration of a public building or public work that is incidental to furnishing supplies or equipment under a supply contract. However, if the construction, alteration or repair is segregable and exceeds $2,000, then the requirements of the Davis-Bacon Act apply.

The ordering activity issuing the task order against this contract will be responsible for proper administration and enforcement of the Federal labor standards covered by the Davis-Bacon Act. The proper Davis-Bacon wage determination will be issued by the ordering activity at the time a request for quotations is made for applicable construction classified installation, deinstallation, and reinstallation services under SIN 132-8.

23. Section 508 Compliance:

If applicable, Section 508 compliance information on the supplies and services in this contract are available in Electronic and Information Technology (EIT) at the following:

The EIT standard can be found at: http://www.Section508.gov/

24.   Prime Contractor Ordering from Federal Supply Schedules:

Prime Contractors (on cost reimbursement contracts) placing orders under Federal Supply Schedules, on behalf of an ordering activity, shall follow the terms of the applicable schedule and authorization and include with each order –

    a.   A copy of the authorization from the ordering activity with whom the contractor has the prime contract (unless a copy was previously furnished to the Federal Supply Schedule contractor); and

    b.   The following statement:

This order is placed under written authorization from _____ dated _____. In the event of any inconsistency between the terms and conditions of this order and those of your Federal Supply Schedule contract, the latter will govern.

25.   Insurance – Work on a Government Installation (JAN 1997) (FAR 52.228-5):

    a.   The Contractor shall, at its own expense, provide and maintain during the entire performance of this contract, at least the kinds and minimum amounts of insurance required in the Schedule or elsewhere in the contract.

    b.   Before commencing work under this contract, the Contractor shall notify the Contracting Officer in writing that the required insurance has been obtained. The policies evidencing required insurance shall contain an endorsement to the effect that any cancellation or any material change adversely affecting the Government's interest shall not be effective—

        1.   For such period as the laws of the State in which this contract is to be performed prescribe; or
        2.   Until 30 days after the insurer or the Contractor gives written notice to the Contracting Officer, whichever period is longer.

    c.   The Contractor shall inset the substance of this clause, including this paragraph (c), in subcontracts under this contract that require work on a Government installation and shall require subcontractors to provide and maintain the insurance required in the Schedule or elsewhere in the contract. The Contractor shall maintain a copy of all subcontractors' proofs of required insurance, and shall make copies available to the Contracting Officer upon request.

26. Software Interoperability:

Offerors are encouraged to identify within their software items any component interfaces that support open standard interoperability. An item's interface may be identified as interoperable on the basis of participation in a Government agency-sponsored program or in an independent organization program. Interfaces may be identified by reference to an interface registered in the component registry located at: http://www.core.gov.

27. Advance Payments:

A payment under this contract to provide a service or deliver an article for the United States Government may not be more than the value of the service already provided or the article already delivered. Advance or pre-payment is not authorized or allowed under this contract. (31 U.S.C. 3324).

1. Scope:

    a. The prices, terms and conditions stated under Special Item Number 132-51 Information Technology Professional Services and Special Item Number 132-52 Electronic Commerce apply exclusively to IT Professional/EC 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) (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. Orders:

    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 Professional/EC 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:

The Inspection of Services–Fixed Price (Aug 1996) (Deviation 1 – May 2003) clause at FAR 52.246-4 applies to firm-fixed price orders placed under this contract. The Inspection–Time-and-Materials and Labor-Hour (May 2001) (Deviation 1 – May 2003) clause at FAR 52.246-6 applies to Time-and-Materials and Labor-Hour 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 (Deviation – 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/EC Services.

9. Independent Contractor:

All IT Professional/EC 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 Conflict 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 placing9 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/EC 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. 52.216-3 (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 Subcontractors:

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/EC Services and Pricing:

   a. The Contractor shall provide a description of services of each type of Professional IT/EC Service offered under Special Item Numbers 132-51 and 132-52. IT Professional/EC 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/EC 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.

Overview of Smartronix, Inc. Special Item Number 132-51 Information Technology (IT) Professional Services Offering. **See Following Full Labor Category/Product Descriptions.** Note: All non-professional labor categories must be incidental to and used solely to support hardware, software and/or professional services, and cannot be purchased separately.

SIN	Order Number	Labor Category Title	Effective 4/6/14 - 4/5/15	Effective 4/6/15 - 4/5/16	Effective 4/6/16 - 4/5/17	Effective 4/6/17 -4/5/18	Effective 4/6/18 -4/5/19
132-51	S001	Program Manager III	$ 142.66	$ 145.52	$ 148.43	$ 151.40	$ 154.42
132-51	S002	Program Manager II	$ 113.88	$ 116.16	$ 118.48	$ 120.85	$ 123.27
132-51	S003	Program Manager I	$ 98.26	$ 100.23	$ 102.23	$ 104.28	$ 106.36
132-51	S004	Management Analyst I	$ 62.65	$ 63.90	$ 65.18	$ 66.49	$ 67.82
132-51	S005	Project Manager (Network Systems)	$ 107.56	$ 109.71	$ 111.91	$ 114.14	$ 116.43
132-51	S006	Engineer III	$ 117.62	$ 119.97	$ 122.37	$ 124.82	$ 127.31
132-51	S007	Computer Programmer III	$ 92.55	$ 94.40	$ 96.29	$ 98.21	$ 100.18
132-51	S008	Network Security Engineer II	$ 128.14	$ 130.70	$ 133.32	$ 135.98	$ 138.70
132-51	S009	Network Security Engineer I	$ 106.78	$ 108.92	$ 111.10	$ 113.32	$ 115.58
132-51	S010	Subject Matter Expert (Network Engineering)	$ 174.51	$ 178.00	$ 181.56	$ 185.19	$ 188.89
132-51	S011	Network Engineer III	$ 99.66	$ 101.65	$ 103.69	$ 105.76	$ 107.87
132-51	S012	Network Engineer II	$ 82.67	$ 84.32	$ 86.01	$ 87.73	$ 89.48
132-51	S013	Subject Matter Expert (Networking Messaging)	$ 85.45	$ 87.16	$ 88.90	$ 90.68	$ 92.49
132-51	S014	Computer Specialist I	$ 42.71	$ 43.57	$ 44.44	$ 45.33	$ 46.23
132-51	S015	Electronics Technician III	$ 71.18	$ 72.60	$ 74.06	$ 75.54	$ 77.05
132-51	S016	Electronics Technician II	$ 58.38	$ 59.54	$ 60.73	$ 61.95	$ 63.19
132-51	S017	Electronics Technician I	$ 46.48	$ 47.41	$ 48.36	$ 49.32	$ 50.31
132-51	S018	Administrative Assistant II	$ 54.83	$ 55.92	$ 57.04	$ 58.18	$ 59.34
132-51	S019	Management Analyst III	$ 86.23	$ 87.95	$ 89.71	$ 91.50	$ 93.33
132-51	S020	Management Analyst IV	$ 129.34	$ 131.93	$ 134.57	$ 137.26	$ 140.00
132-51	S021	Network Engineer IV	$ 170.89	$ 174.31	$ 177.80	$ 181.35	$ 184.98
132-51	S022	Network Security Specialist I	$ 137.34	$ 140.09	$ 142.89	$ 145.75	$ 148.66
132-51	S023	Network Security Specialist II	$ 156.60	$ 159.73	$ 162.92	$ 166.18	$ 169.50
132-51	S024	Web Development Engineer I	$ 87.33	$ 89.08	$ 90.86	$ 92.68	$ 94.53
132-51	S025	Technical Writer/Editor	$ 84.49	$ 86.18	$ 87.91	$ 89.67	$ 91.46
132-51	S026	Systems Administrator	$ 70.12	$ 71.52	$ 72.95	$ 74.41	$ 75.90
132-51	S027	Systems Engineer	$ 73.12	$ 74.58	$ 76.07	$ 77.59	$ 79.15
132-51	S028	Program Manager IV	$ 145.63	$ 148.54	$ 151.51	$ 154.54	$ 157.64
132-51	S029	Task Leader	$ 123.00	$ 125.46	$ 127.97	$ 130.53	$ 133.14
132-51	S030	IT Manager III	$ 92.04	$ 93.88	$ 95.76	$ 97.67	$ 99.63
132-51	S031	IT Manager II	$ 61.09	$ 62.31	$ 63.56	$ 64.83	$ 66.13
132-51	S032	IT Manager I	$ 57.42	$ 58.57	$ 59.74	$ 60.94	$ 62.16
132-51	S033	Computer Artist	$ 128.62	$ 131.19	$ 133.81	$ 136.49	$ 139.22
132-51	S034	Copy Editor	$ 190.99	$ 194.81	$ 198.70	$ 202.68	$ 206.73
132-51	S035	Copy Writer	$ 125.47	$ 127.98	$ 130.54	$ 133.15	$ 135.81
132-51	S036	Creative Director	$ 176.73	$ 180.27	$ 183.87	$ 187.55	$ 191.30
132-51	S037	Data Architect	$ 180.86	$ 184.48	$ 188.17	$ 191.93	$ 195.77
132-51	S038	Data Warehouse Architect	$ 333.35	$ 340.01	$ 346.81	$ 353.75	$ 360.83
132-51	S039	Graphic Design Supervisor	$ 264.89	$ 270.19	$ 275.59	$ 281.10	$ 286.72
132-51	S040	Interactive Visual Director	$ 264.23	$ 269.51	$ 274.91	$ 280.40	$ 286.01
132-51	S041	Portal Architect	$ 369.59	$ 376.98	$ 384.52	$ 392.21	$ 400.05
132-51	S042	Portal Developer	$ 163.92	$ 167.20	$ 170.55	$ 173.96	$ 177.44
132-51	S043	Virtualization Programmer	$ 127.26	$ 129.81	$ 132.40	$ 135.05	$ 137.75
132-51	S044	Virtualization Systems Manager	$ 268.11	$ 273.48	$ 278.95	$ 284.52	$ 290.22
132-51	S045	Quality Assurance Analyst	$ 161.63	$ 164.87	$ 168.16	$ 171.53	$ 174.96
132-51	S046	Sr. Software Developer	$ 143.44	$ 146.31	$ 149.24	$ 152.22	$ 155.27
132-51	S047	Subject Matter Expert III (Virtualization)	$ 319.16	$ 325.54	$ 332.05	$ 338.69	$ 345.47
132-51	S048	Subject Matter Expert II (Virtualization)	$ 235.91	$ 240.62	$ 245.44	$ 250.35	$ 255.35
132-51	S049	Subject Matter Expert II (Virtualization)	$ 226.96	$ 231.50	$ 236.13	$ 240.85	$ 245.67
132-51	S050	Software Engineer	$ 215.85	$ 220.17	$ 224.57	$ 229.06	$ 233.64
132-51	S051	Sr. Art Director	$ 167.64	$ 170.99	$ 174.41	$ 177.90	$ 181.46
132-51	S052	Sr. SharePoint Developer	$ 181.75	$ 185.39	$ 189.10	$ 192.88	$ 196.74
132-51	S053	Virtualization Systems Engineer	$ 164.73	$ 168.03	$ 171.39	$ 174.81	$ 178.31

Order #	Labor Category Title	Minimum Experience	Minimum Education	Functional Responsibilities
S001	Program Manager III	12 years of program management or project related experience.	Master's degree in, business management, finance, accounting, computer science, information systems, engineering or project related discipline required. 2 years project related experience may be substituted for each year short of the required degree.	The Program Manager III serves as the manager or director on complex and multiple projects. Manages other project managers providing corporate level resources and oversight. This individual utilizes a broad theoretical and practical background in management planning, operations, control and problem solving.
S002	Program Manager II	10 years of program management or project related experience.	Bachelor's degree in, business management, finance, accounting, computer science, information systems, engineering or project related discipline required. 2 years project related experience may be substituted for each year short of the required degree.	The Program Manager II serves as the overall lead or director on complex projects and contracts and serves as the principal liaison between the Contractor and the Government. The Program Manager II is responsible for ensuring that all tasking associated with a Government-funded program or project is completed effectively and efficiently, on time and within budget. The Program Manager II is also responsible for providing updated technical, managerial, and contractual inputs to the Government.
S003	Program Manager I	8 years of program management or project related experience.	Bachelor's degree in, business management, finance, accounting, computer science, information systems, engineering or project related discipline required. 2 years project related experience may be substituted for each year short of the required degree.	The Program Manager I serve as a task management leader on simple or multiple tasks. Provides technical and management direction to project personnel and is the serves as the initial liaison between the Contractor and the Government. Carries out project technical and financial management tasking on day to day operations, including man-hour loading, assuring timely contract deliverables, and personnel management.
S004	Management Analyst I	3 years of project related experience.	Associates degree required. 2 years project related experience may be substituted for each year short of the required degree.	The Management Analyst (MA) I assists preparation of technical, program or contract management inputs, briefings, and plans; analysis of technical, program, or contract data; forecasting of economic and performance data; and general technical, program, or contract management support. Analyzes IT management decisions and systems acquisition.
S005	Project Manager (Network Systems)	10 years of network administration or project related experience.	Bachelor's degree in Engineering, Computer Science, or Business plus four (4) years of experience in managing the implementation, integration, migration, or administration of network systems. High School Diploma and eight (8) years' experience in the above areas may be substituted.	The Project Manager (Network Systems) manages all tasking with a network project to ensure that it is completed effectively and efficiently, on time and within budget. Supervises, directs, and manages network engineers, electronic technicians, acquisition analysts, computer specialists, software/training specialists, and other Contractor personnel in the completion of network system installation, integration, migration, or administration. The Project Manager (Network Systems) serves as the on-site technical point of contact for network services provided by the Contractor. Provides updated technical and status inputs to the Government.

Order #	Labor Category Title	Minimum Experience	Minimum Education	Functional Responsibilities
S006	Engineer III	10 years of project related hardware or software engineering experience.	Bachelor's degree in engineering, physics, computer science, information systems, technical or project related discipline required.	The Engineer III conducts operational requirements analyses, and assists design team input and workflow for hardware and software engineering related tasks. Provides planning and scheduling for system design, installation and implementation. Develops applicable systems support concepts and/or designs for simple and complex hardware and/or software systems. Assists design and installation package reviews. Verifies validity of COTS packages to meet the system design and operational requirements. Manage implementation and installation of system or network hardware and software packages. Monitors implementation of COTS tools to manage project efforts and monitor system design flaws, anomalies, or changes. Applies logistics engineering principles and practices to the planning, development and implementation of logistics and configuration support requirements for software and hardware.
S007	Computer Programmer III	7 years of programming experience.	Bachelor's degree in engineering, business, information systems, information technology, computer science, mathematics, or project related discipline. 2 additional years of relevant experience may be substituted for each year short of the Bachelor's degree requirement.	The Computer Programmer (CP) III responsible for designing, coding, debugging, testing, or documenting of software programs, utilizing programming languages such as BASIC, C++, UNIX, Visual or Real Time Programs, FORTRAN, COBOL, etc. Manages programming functions for simple projects and systems.
S008	Network Security Engineer II	9 years of project related experience in support network systems security.	Associates degree in engineering or information systems, computer science. Certifications with industry leading network manufacturers (i.e., Cisco, Bay, Cabletron, Fore, etc.) may be substituted for required degree.	The Network Security Engineer (NSE) II plans and performs the implementation of network security or intrusion detection systems within a wide area network or local area network. Designs and installs systems security features in simple and complex networks. Analyzes monitors and reports on enterprise level security readiness. Directs network security risk analyses and risk assessments. Analyzes new technologies for systems security features, and recommends new improved security features, techniques, software, hardware and policies.
S009	Network Security Engineer I	6 years of project related experience in support network systems security.	Associates degree in engineering or information systems, computer science. Certifications with industry leading network manufacturers (i.e., Cisco, Bay, Cabletron, Fore, etc.) may be substituted for required degree.	The Network Security Engineer (NSE) I assists the implementation of network security or intrusion detection systems within a wide area network or local area network. Assists installation of systems security features in simple and complex networks. Analyzes monitors and reports on enterprise level security readiness. Performs network security risk analyses and risk assessments. Analyzes new technologies for systems security features, and recommends new improved security features, techniques, software, hardware and policies.

Order #	Labor Category Title	Minimum Experience	Minimum Education	Functional Responsibilities
S010	**Subject Matter Expert (Network Engineering)**	10 years of project related technical experience in support network systems, design, installation, support and training.	MCSE certification or appropriate project related standard industry certification. Master's degree or Bachelor's degree and four additional years' experience in Engineering or Computer Science related discipline; or Engineering Certification from Microsoft, Novell, Banyan or other industry network or operating system manufacturers.	The Network Engineering Subject Matter Expert (NE/SME) is a highly trained and skilled individual, responsible to oversee all network operations, design and installations. Manages operations of complex systems, servers and fiber optic network backbones. Provides insight and direction into commercial or government network operations centers concepts of design, configuration, migration and operational solutions. Trains staff and customer personnel in the latest network systems management and operating procedures.
S011	**Network Engineer III**	8 years of technical project experience.	Bachelor's degree in engineering or information systems, computer science. An engineering certification from Microsoft, Novell, Banyan or other industry network operating system vendor may be substituted in lieu of a Bachelor's degree. In addition, certifications with industry leading network manufacturers (i.e., Cisco, Bay, Cabletron, Fore, etc.) may be substituted for years of experience with non-college graduates (one year per certification). 2 years project related experience may be substituted for each year short of the required degree.	The Network Engineer (NE) III manages and directs implementation, maintenance, management, administration, and troubleshooting of network operating system and messaging software as well as file server, router, switch, and hub hardware. Utilizes in-depth knowledge of network information systems in developing wide area network designs and architectures as well as providing technical evaluations of various networking software and hardware products.
S012	**Network Engineer II**	5 years of technical project experience.	Bachelor's degree in engineering or information systems, computer science. An engineering certification from Microsoft, Novell, Banyan or other industry network operating system vendor may be substituted in lieu of a Bachelor's degree. In addition, certifications with industry leading network manufacturers (i.e., Cisco, Bay, Cabletron, Fore, etc.) may be substituted for years of experience with non-college graduates (one year per certification). 2 years project related experience may be substituted for each year short of the required degree.	The Network Engineer (NE) II directs implementation, maintenance, management, administration, and troubleshooting of network operating system and messaging software as well as file server, router, switch, and hub hardware. Utilizes in-depth knowledge of network information systems in providing technical evaluations of various networking software and hardware products.

Order #	Labor Category Title	Minimum Experience	Minimum Education	Functional Responsibilities
S013	Subject Matter Expert (Network Messaging)	4 years project related experience in devising network messaging solutions.	Associate's degree in engineering, business, information systems, or project related discipline. Technical training from industry standard (i.e. Banyan Vines or similar) or military technical schooling may be substituted for the degree requirement.	The Network Messaging Subject Matter Expert (NM/SME) investigates, analyzes, configures, installs and monitors messaging systems protocols for Defense Messaging System (DMS) or other appropriate level messaging systems. Conducts problem solving and error correction for messaging software solutions on DMS or Enterprise systems. Serves as subject matter expert for matters related to messaging systems and components.
S014	Computer Specialist I	4 years project related experience.	Associates Degree in computer science, business, engineering, information systems finance, or a project related discipline. An appropriate level engineering certification from industry network operating system vendor may be substituted for required degree.	The Computer Specialist (CSPEC) I install and integrate computer-based hardware and software, including network adapter, disk drive, motherboard, UPS, tape backup, or other peripheral installation, integration, and/or troubleshooting. Software installations include operating systems, office applications, and/or utility software installation, integration, and troubleshooting.
S015	Electronics Technician III	3 years project related experience.	Associates degree in engineering, business, information systems, or project related discipline, or equivalent coursework in a college undergraduate program, military or industry technical school. 2 years of additional project related experience may be substituted for each year short of degree.	The Electronics Technician (ET) III supports the project manager, engineers, or team leader. This individual performs assigned tasks including: requirements analysis, integration and installation of hardware and software, testing, troubleshooting, fault isolation, system administration, wiring, and related tasks. This individual ensures conformity to quality assurance requirements. May support one or more of the following areas in personal computers; fileservers; network electronic devices such as printers, hubs, and back-up devices; phone switches; shipboard or aeronautical electronic components; microprocessor-based test sets; cable plant installation and testing, soldering, cable manufacturing and other critical electronic devices.
S016	Electronics Technician II	2 years project related experience.	Associates degree in engineering, business, information systems, or project related discipline, or equivalent coursework in a college undergraduate program, military or industry technical school. 2 years of additional project related experience may be substituted for each year short of degree.	The Electronics Technician (ET) II supports the project manager, engineers, or team leader. This individual performs assigned tasks including: requirements analysis, integration and installation of hardware and software, testing, troubleshooting, fault isolation, system administration, wiring, and related tasks. This individual ensures conformity to quality assurance requirements. May support one or more of the following areas in personal computers; fileservers; network electronic devices such as printers, hubs, and back-up devices; phone switches; shipboard or aeronautical electronic components; microprocessor-based test sets; cable plant installation and testing, soldering, cable manufacturing and other critical electronic devices.
S017	Electronics Technician I	4 years project related experience.	High School Diploma or Equivalent required or equivalent coursework in a military or industry technical school.	The Electronics Technician (ET) I supports the project manager, engineers, or team leader. This individual performs assigned tasks including: requirements analysis, integration and installation of hardware and software, testing, troubleshooting, fault isolation, system administration, wiring, and

Order #	Labor Category Title	Minimum Experience	Minimum Education	Functional Responsibilities
				related tasks. This individual ensures conformity to quality assurance requirements. May support one or more of the following areas in personal computers; fileservers; network electronic devices such as printers, hubs, and back-up devices; phone switches; shipboard or aeronautical electronic components; microprocessor-based test sets; cable plant installation and testing, soldering, cable manufacturing and other critical electronic devices.
S018	Administrative Assistant II	6 years of experience including office management, financial analysis, data collection, and reports processing.	High School Diploma or equivalent required.	The Administrative Assistant (ADMIN) II must possess demonstrated experience in the assistance of program managers or project managers for the completion of routine administrative and/or clerical duties, to include report generation, action item development, routine project tracking, contractor coordination, or meeting attendance and meeting minute development. Supervises other administrative personnel.
S019	Management Analyst III	7 years of project related experience.	Bachelor's degree required. 2 years project related experience may be substituted for each year short of the required degree.	The Management Analyst (MA) III prepares develops and presents technical, program or contract management inputs, briefings, and plans; analysis of technical, program, or contract data; forecasting of economic and performance data; and general technical, program, or contract management support. Analyzes IT management decisions and systems acquisitions. Directs and leads a team of Management Analysts in analyzing and solving customer management problems.
S020	Management Analyst IV	10 years of project related experience.	Bachelor's degree required. 2 years project related experience may be substituted for each year short of the required degree.	The Management Analyst (MA) IV prepares develops and presents technical, program or contract management inputs, briefings, and plans; analysis of technical, program, or contract data; forecasting of economic and performance data; and general technical, program, or contract management support. Analyzes IT management decisions and systems acquisitions. Manages the MA teams in solving complex programmatic or enterprise wide management related problems.
S021	Network Engineer IV	10 years of technical project experience.	Bachelor's degree in engineering or information systems, computer science. An engineering certification from Microsoft, Novell, Banyan or other industry network operating system vendor may be substituted in lieu of Bachelor's degree. In addition, certifications with industry leading network manufacturers (i.e., Cisco, Bay, Cabletron, Fore, etc.) may be substituted for years of experience with non-college graduates (one year per certification).	The Network Engineer (NE) IV manages and/or implements; maintenance, management, administration, and troubleshooting of network operating system and messaging software as well as file server, router, switch, and hub hardware. Conducts and manages increasingly complex or multiple network systems integration efforts. Utilizes in-depth knowledge of network information systems and emerging technologies in developing wide area network designs and architectures and/or provides technical evaluations of various networking software and hardware products including implementation.

Order #	Labor Category Title	Minimum Experience	Minimum Education	Functional Responsibilities
			2 years project related experience may be substituted for each year short of the required degree.	
S022	Network Security Specialist I	2 years of technical project experience.	Bachelor's degree. A trade school certification; an MCSE, CNE, or Industry Equivalent Certificate; or Military training related to the area of expertise may be substituted for the required degree.	Assists with the operation of a Network Operations Center in a secure environment. May support firewalls, VPN's, routers, switches and other miscellaneous hardware and software.
S023	Network Security Specialist II	4 years of technical project experience.	Bachelor's degree. A trade school certification; an MCSE, CNE, or Industry Equivalent Certificate; or Military training related to the area of expertise may be substituted for the required degree.	Responsible for the operation of a Network Operations Center in a secure environment. May support firewalls, VPN's, routers, switches and other miscellaneous hardware and software.
S024	Web Development Engineer I	1 year of development experience.	Bachelor's degree in Engineering, Computer Engineering, or Computer Science or equivalent.	Assists in the design, coding, testing, or documentation of web-based systems, utilizing various programming and scripting languages, data architectures, protocols and operating systems.
S025	Technical Writer/Editor	6 years' experience in government and/or commercial document production or project related fields.	Bachelor's Degree in English, Communications, Journalism or related field.	At least two years of related experience preparing technical documents in support of IT-related projects. Develops and refines material for publication and makes recommendations; reviews and edits prepared materials. Requires the ability to write consistent and clear documentation, with the goal of explaining complex information simply and accurately. Experience interacting with technical personnel and using a variety of source material to produce documents. Knowledge of the design and production of technical documentation, and proficiency in word processing and desktop publishing is required.
S026	Systems Administrator	2 years of project related experience.	Associates Degree in Engineering, Information Systems, Computer Science, or other project related discipline. 2 years of experience in administration of LAN operating systems, servers, and applications may be substituted for each year short of the degree.	The System Administrator performs administration, troubleshooting, and support of LAN operating systems, servers, and applications.
S027	Systems Engineer	4 years of project related experience.	Bachelor's Degree in Engineering, Information Systems, Computer Science, or other project related discipline. 2 years of project related experience may be substituted for each year short of the degree.	The Systems Engineer performs design, installation, administration, troubleshooting, and support of LAN operating systems, servers, and applications. Manages development and implementation of system specifications, designs, integration, testing, and documentation. Develops risk management and mitigation strategy. Ensures compliance with QA standards.

Order #	Labor Category Title	Minimum Experience	Minimum Education	Functional Responsibilities
S028	Program Manager IV	15 years of project related experience.	Master's Degree in Business Management, Finance, Accounting, Computer Science, Information Systems, Engineering, or other project related discipline. 2 years of project related experience may be substituted for each year short of the degree.	Serves as the Director on complex and multiple projects. Manages other Project Managers providing corporate-level resources and oversight. Possesses an understanding of military and federal information technology systems acquisition and management processes, procedures, regulations, and documentation. In-depth knowledge of Federal Information Technology risk management techniques and procedures.
S029	Task Leader	8 years of project related experience.	Bachelor's Degree in Computer Science, Engineering, Business, Management, or related discipline. 2 years of project related experience may be substituted for each year short of the degree.	The Task Leader acts as overall Systems Engineer, Technical Manager, and Administrator for one or more delivery orders; serves as the primary interface and point of contact with the Program Manager on technical program/project issues. Supervises program/project operations by developing systems engineering and management procedures, and planning and execution of the engineering and technical effort. Responsible for monitoring and reporting progress, managing the acquisition and employment of the program/project resources, and managing and controlling the financial and administrative aspects of the program/project with respect to delivery order requirements.
S030	IT Manager III	4 years of project related experience.	Bachelor's Degree in Engineering, Information Systems, Computer Science, or other project related discipline. Degree Substitution: 2 years of project related experience may be substituted for each year short of the degree.	The IT Manager III performs technical and analytical assignments in support of Information Technology tasking.
S031	IT Manager II	2 years of project related experience.	Bachelor's Degree in Engineering, Information Systems, Computer Science, or other project related discipline. 2 years of project related experience may be substituted for each year short of the degree.	The IT Manager II performs technical and analytical assignments in support of Information Technology tasking.
S032	IT Manager I	2 years of project related experience.	Associates Degree in Engineering, Information Systems, Computer Science, or other project related discipline. 2 years of project related experience may be substituted for each year short of the degree.	The IT Manager I performs technical and analytical assignments in support of Information Technology tasking.
S033	Computer Artist	4 years of project related experience.	High School Diploma or Equivalent.	The Computer Artist utilizes both visual artistic and technical skills to design computer graphics, desktop publishing and website projects. Creates illustrations, logos, brochures, web page graphics, signage and various other forms of visual communication.
S034	Copy Editor	9 years of project related experience.	Bachelor's Degree in Fine Arts, Visual Design or related discipline.	The Copy Editor ensures that text is readable, accurate and ready for publication. Writes all non-creative features to conform to the needs of the project, provides editorial

Order #	Labor Category Title	Minimum Experience	Minimum Education	Functional Responsibilities
			2 years of project related experience may be substituted for each year short of the degree.	content, edit copy for length, context, style and structure.
S035	Copy Writer	6 years of project related experience.	Bachelor's Degree in Fine Arts, Visual Design or related discipline.	The Copy Writer develops written content for advertisement, promotions, websites, sales letters, articles, books and the production of other verbiage for information, education and other public relations outlets.
S036	Creative Director	7 years of program management or project related experience.	Bachelor's Degree in Fine Arts, Visual Design or related discipline.	The Creative Director develops concepts, basic presentation approaches and direct layout. Oversees the creative functionality for all internal and external material. Ensures timely and informative communication takes place between the creative function and the team. Responsible for the creative quality. Collaborates with technology and production leads to discuss requirements and scheduling to outline presentation concepts. Responsible for quality control which includes proofing, reviewing, measuring and evaluating creative output performance.
S037	Data Architect	6 years of project related experience.	Bachelor's Degree in a Technical discipline. Industry Equivalent Certification may be substituted for the required degree.	The Data Architect creates and implements a design for the storage and maintenance of data or to improve an existing system. Develops databases, data integration schemas and support the exchange of data between systems. Possesses an end to end vision to see how a logical design will translate into one or more physical databases and how the data will flow through the successive stages involved. Addresses issues of data migration and have an understanding of data dictionaries.
S038	Data Warehouse Architect	9 years of project related experience.	Bachelor's Degree in Computer Science, Information Systems, Engineering or related Technical discipline. 2 years of complex data architecting project related experience may be substituted for each year short of the degree.	The Data Warehouse Architect designs and develops enterprise data warehouse components, including databases, ETL, MS-SQL stored procedures and functions. Performs data analysis and modeling functions to support the project.
S039	Graphic Design Supervisor	6 years of program management or project related experience.	Bachelor's Degree in Fine Arts, Visual Design or related discipline. 2 years of project related experience may be substituted for each year short of the degree.	The Graphic Design Supervisor is responsible for graphic design projects from the idea stage to final production. Creates and overseas the design of websites, digital media, digital campaigns and digital identity programs or websites.
S040	Interactive Visual Director	6 years of project related experience.	Bachelor's Degree in Fine Arts, Visual Design or related discipline. 2 years of project related experience may be substituted for each year short of the degree.	The Interactive Visual Director ensures efficient, creative execution of next generation rich media. Provides solutions necessary to turn on-line content into web, social media and mobile applications. Creates mock-ups and wireframes and translates into final design. Delivers a range of concepts and design for each project. Understands how development impacts design and visual perception.

Order #	Labor Category Title	Minimum Experience	Minimum Education	Functional Responsibilities
S041	Portal Architect	7 years of project related experience.	Bachelor's Degree in Engineering or IT related technical discipline. Industry Equivalent Certification may be substituted for the required degree.	The Portal Architect has in-depth knowledge of portal solution architecting, designing, business intelligence, developing, performance tuning, capacity planning and problem solving. Converts requirements into functional specifications and technical design. Has an extensive understanding of application delivery utilizing various programming languages.
S042	Portal Developer	5 years of project related experience.	Bachelor's Degree in an IT related technical discipline. Industry Equivalent Certifications may be substituted for the required degree.	The Portal Developer creates technical designs based on specifications, develops and tests application modules, evaluates corporate operating processes and recommends efficiency improvement options. Performs or coordinates website updates and discusses problems with technical staff and management.
S043	Virtualization Programmer	5 years of project related experience.	Bachelor's Degree in Computer Science, Information Systems or technical related discipline. Industry Equivalent Certification may be substituted for the required degree.	The Virtualization Programmer programs computer hardware and software systems for functionality.
S044	Virtualization Systems Manager	8 years of program management or project related experience.	Bachelor's Degree in Engineering, Computer Science, Business, Technical or project related discipline. 2 years of project ITIL, VMware related experience may be substituted for each year short of the degree.	The Virtualization Systems Manager will focus on technical leadership of processes and technologies supporting a highly virtualized secure enterprise environment. Serves as the focal point and interface to solutions and advanced concept teams for technical requirements and design oversight to ensure future deployed systems and services support a highly automated and integrated operations environment.
S045	Quality Assurance Analyst	4 years of project related experience.	Bachelor's Degree in Business, Information Systems or project related discipline. 2 years of project related experience may be substituted for each year short of the degree.	The Quality Assurance Analyst is responsible for tracking operational measures and metrics relating to quality and serves as the primary point of contact for quality issues and corrective measures. Conducts audits and reviews/analyzes data and documentation.
S046	Sr. Software Developer	8 years of project related experience.	Bachelor's Degree in Computer Science, Information Systems or related discipline. 2 years of related experience developing complex software solutions may be substituted for each year short of a degree.	The Sr. Software Developer creates high quality software within agreed timescales. Works with a team to develop software from a set of requirements utilizing the prescribed methodology and works within a framework of published standards and practices. Must possess knowledge of multiple methodologies (e.g. SCRUM) and have extensive experience developing java, .NET, C# or other related languages.
S047	Subject Matter Expert III (Virtualization)	10 years of project related experience.	Bachelor's Degree in Computer Science, Computer Engineering, Information Systems, Business or related discipline. ITIL training and/or certification, VMware certification.	The SME III is an expert in virtualized server systems, specifically VMware. Leads a team designing and building the systems, tools and procedures that enable the client to run a world class Software as a Service (SaaS), Platform as a Service (PaaS) and Infrastructure as a Service (IaaS) environments. Has strong overall knowledge of Information Technology logical and technical architecture principles with a particular focus on scalable and robust virtualized server designs. Helps to create

Order #	Labor Category Title	Minimum Experience	Minimum Education	Functional Responsibilities
				the infrastructure roadmap that enables continued rapid growth.
S048	**Subject Matter Expert II (Virtualization)**	7 years of project related experience.	Bachelor's Degree in Computer Science, Computer Engineering, Information Systems, Business or related discipline. ITIL training and/or certification, VMware certification.	The SME II is an expert in virtualized server systems, specifically VMware. May lead or be part of a team designing and building the systems, tools and procedures that enable the client to run a world class SaaS, PaaS and IaaS environments. Has a strong overall knowledge of IT logical and technical architecture principles with a particular focus on scalable and robust virtualized server designs. Contributes towards the creation of the infrastructure solution.
S049	**Subject Matter Expert I (Virtualization)**	5 years of project related experience.	Bachelor's Degree in Computer Science, Computer Engineering, Information Systems, Business or related discipline. ITIL training, VMware training at a minimum.	The SME I is an expert in virtualized server systems, specifically VMware. May lead or be part of a team designing and building the systems, tools and procedures that enable the client to run a world class SaaS, PaaS and IaaS environments. Has a strong overall knowledge of IT logical and technical architecture principles with a particular focus on scalable and robust virtualized server designs.
S050	**Software Engineer**	8 years of project related experience.	Bachelor's Degree in Computer Science, Computer Engineering, Information Systems or related discipline. 2 years of project related experience may be substituted for each year short of the degree.	The Software Engineer develops software solutions to meet performance engineering needs, develops and utilizes automated and manual scripts and identifies system bottlenecks.
S051	**Sr. Art Director**	6 years of project related experience.	Bachelor's Degree in Fine Arts, Visual Design or related discipline. 2 years of project related experience may be substituted for each year short of the degree.	The Sr. Art Director has a diverse background consisting of requirements analysis, program support or business analysis. Must be capable of working with multiple small project teams in a highly creative and agile environment. Manages the efforts of all internal and external art staff. Responsible for hands-on delivery of key assets.
S052	**Sr. SharePoint Developer**	4 years of SharePoint Development with 6 months working the latest version of SharePoint.	Associates Degree in Computer Science, or IT related discipline. Industry Equivalent Certifications may be substituted for the required degree.	The Sr. SharePoint Developer designs and custom builds SharePoint applications. Possesses SharePoint administrator skills to effectively configure and troubleshoot SharePoint infrastructures. Must be capable of designing, developing and deploying applications using all versions of SharePoint (C#, Ajax, ASP.NET and XML) Web Services. Documents software requirements, conducts code analysis utilizing quality tools and coordinates testing with the test team.
S053	**Virtualization Systems Engineer**	5 years of implementing computer systems, software and networks.	Bachelor's Degree in Engineering, Computer Engineering, Information Technology or related discipline. 2 years of Enterprise Data Storage Architecture, Enterprise Hosting Services Design and/or Enterprise Data Processing experience may be substituted	The Virtualization Systems Engineer provides technical expertise on cloud computing and virtualization technologies including server, storage, network subsystems, platform software and management tools, integration techniques and cloud application technologies such as Google MapReduce, Apache Hadoop and Amazon S3. Provides enterprise architecture analysis and conducts prototypes to highlight and evaluate

Order #	Labor Category Title	Minimum Experience	Minimum Education	Functional Responsibilities
			for each year short of the degree.	acquisition risks and demonstrates the potential impact of technology in the mission and business environment.

Equivalencies:				
			Education: College level equivalencies: 1 year college equals - 2 years college equals - 3 years college equals - 4 years college equals -	**Equivalent:** 30 Credits in associated field of study 60 Credits in associated field of study 90 Credits in associated field of study 120 Credits in associated field of study
			Experience: Bachelor's Degree and 4 yrs. exp. 2 years' experience MCSE, CNE, Industry Equivalent Certificate -	**Equivalent:** Master's Degree One year college Can be substituted for degreed positions as noted.

Software as a Service (SaaS)/Email as a Service (EaaS)

The Smartronix Online Network Engagement (ONE) Platform provides federal enterprise customers with the same flexibility and extensibility they would have with their on premise solutions, with all of the added benefits of Cloud Infrastructure as a Service, and the on demand self-service characteristics of Software as a Service. At every design decision point we opted for the solution that provided the most flexibility based on our expert knowledge of deploying large scale messaging systems in the federal and DoD space. Our solution is significantly different than most online Email service providers in that each Agency can have a fully customized and integrated experience while still receiving the economic benefits inherent in multi-tenant shared service environments.

The Smartronix' ONE Platform fully adheres to the "Essential Characteristics" as defined in the National Institute of Standards and Technology (NIST) Working Definition for cloud computing. The Smartronix ONE Platform provides the most flexible, elastic, on-demand access to messaging services. Our cloud solution spans two world-class Terremark data centers, separated by greater than a thousand miles, which provide access to near limitless resources which can be rapidly provisioned to a customer service through our tightly integrated, layered solution. Leveraging resource pooling enables our solution to be elastic and grow to meet evolving customer needs. Smartronix ONE Platform offers a fully functional, reliable, secure, feature-rich cloud Email capability built on industry leading Email products and a highly reliable and proven infrastructure. Smartronix' Email offering includes support for mobile devices, and archiving and eDiscovery functions. Our Email offering provides full function access to all email, collaboration, and administration functions through all mainstream web browsers. Our Email offering provides a minimum of 5GB storage per mailbox, which can be increased and aggregated across the domain. Our Email offering also provides support for large mailboxes along with a hierarchical storage capability. Mailbox sizes are administratively set by each customer and can support virtually any size requirements.

Email as a Service (EaaS)

Smartronix offers Email services in the following cloud environments:

Government Community: A cloud built on dedicated hardware. The routers, firewalls, network management services, servers, storage, equipment racks, and wide area network transport are all dedicated to government only customers. There are no other systems, customers, or non-government data leveraging the equipment comprising the Government community offering. Each client's data and cloud resources are isolated both virtually and physically from other systems. The service is implemented in multitenant mode which enables granular permissions-based isolation of customer's data.

The flexibility that this solution provides over a standard Office 365 or BPOS solution is substantial. By enabling a full Exchange Server 2010 enclave we can allow agencies to independently tailor solution in the following ways:

- Each Agency can provision their own TIC/MPLS/MTIP connection terminating into the multi-tenant environment ensuring the full path between on premise users and email is government only

- Each Agency can determine how they want to support Identity Management either via:
  - Synchronization via Forefront Identity Manager
  - Federated authentication via SAML 2.0 tokens through e-mail address or UPN claims sent from the customer's SAML 2.0 compliant solution
  - Forms based authentication
  - Certificate based authentication
    - HSPD 12
    - CAC

- Digital certs
  - ADFS
    - Each Agency Administrator has domain level control over the following aspects:
      - Message Hygiene, A/V rules, Content Filtering
      - Alias and delegation configurations
      - Transport configuration and journaling rules
      - Recipient management and distribution group management
      - EDiscovery
      - Role Based Access Control at tenant level and below

Provider Furnished Equipment Private Cloud: The private cloud service is built on dedicated hardware. The routers, firewalls, network management services, servers, storage, equipment racks, and wide area network transport are all dedicated to the ordering activity's private cloud. There are no other systems, customers, or non-government data leveraging the equipment comprising the private cloud offering. Implementation of Smartronix' templated solution and compliance with controls allows us to deliver A&A documentation and an accreditation ready environment targeted specifically to deliver a Moderate Impact System in the shorted possible duration. All data is isolated both virtually and physically from other systems. The Private Cloud is implemented in single tenant mode which enforces granular permissions-based isolation of customer's data. Data is stored on dedicated storage appliances provisioned specifically for the private cloud.

Secure Enclave Private Cloud: A Secret Private Cloud (SPC) is built to meet FISMA High Impact requirements. It leverages a secured open storage environment compliant with ICS 705-1 standards. The system is integrated at two different locations with a distance greater than 1,000 miles between the two facilities. From the type-1 cryptographic device inbound all systems, network routers/switches, system/network security devices, racks, and storage will be dedicated to the ordering activity. All systems and equipment associated with a customer's SPC are dedicated platforms in separate equipment racks and secured physical space. Each have dedicated firewalls, network/host intrusion prevention, security management systems, monitoring systems, and other related systems on hardware dedicated to the specific SPC.

Smartronix ONE Platform is a highly secure cloud Email environment complying with all Federal regulations regarding the handling of publicly identifiable information (PII) and the capture and storage of information collected on behalf of email users. Smartronix administrators have limited access to this information and the information cannot be accessed by individuals outside the users' home organization without authorization. Any data stored within the ONE Platform will be managed in accordance with the appropriate FISMA rating for the type of service being acquired. Smartronix uses strong encryption to protect the session content of all administration and remote access functions. A FIPS-compliant SSL VPN supports all remote functions. The Smartronix solution follows NIST SP 800-122, M-06-16 and M-07-16 ensuring that all PII stored within our cloud Email environment is secured.

Enterprise Application Components

Smartronix ONE Platform provides complete, configurable enterprise software. Smartronix ONE Platform will include Microsoft Exchange Server 2010, Microsoft Lync Server 2010, BlackBerry Enterprise Servers, Symantec Enterprise Vault and eDiscovery, and the FortiMail Email Security Solution as the underlying messaging technologies. The Microsoft Unified Communications platform—consisting of Lync and Exchange—provide the richest set of messaging features available on the market. Symantec provides the industry's most widely deployed enterprise archiving and eDiscovery solution. And FortiMail is one of the largest, security-focused, and highly scalable message hygiene solutions on the market. Agencies can configure, extend, and integrate Exchange, Lync, and SharePoint as integral elements of their enterprise architectures. For example, for the many agencies that already have custom applications built on Exchange and SharePoint, the Smartronix ONE Platform will enable agencies to easily migrate their application into the cloud.

Service Management and Operations

Residing at the edge of the Smartronix ONE platform, Smartronix has built a security platform to deny unauthorized access, enforce access control, and enable security scanning for malicious content in email messages. Edge security protection enforced by FortiMail provides customer-tailored anti-phishing, anti-spam, and anti-virus scanning at the message gateway level prior to delivery into the internal messaging infrastructure. All inbound/outbound messages are inspected using FortiMail's configurable scan engines to detect and take action against a suspicious message. For single tenant SubLots, additional defense in-depth for message filtering will be provided through a tiered anti-virus deployment of Forefront Protection for Exchange.

Government Administrators have the ability to disable agency IP traffic on ports as desired or required by agency policy and can require all traffic over SSL/TLS session supporting FIPS 140-2 encryption. All of the components in our solution support this ability. Specifically, Exchange Server 2010 now supports FIPS 140-2, as of Service Pack 1, and can be configured to disable algorithm's that are not compliant. Windows Threat Management Gateways are compatible with GPO enforcement of FIPS cryptography and SCHANNEL CSP configuration. Lync Server 2010 also supports FIPS 140-2 mode.

A major advantage of the Smartronix ONE Platform is the ability for any tenant to utilize a dedicated circuit TIC/MTIP/MPLS connection into the facilities. (Even for Government Community Cloud.) This allows the customer to define the specific requirements and devices necessary to terminate the connection including routers, firewalls, IPS, or WAN accelerators. This reduces the procurement risks associated with Agencies having specific requirements that may prevent them from using a standard service.

The Smartronix ONE Agency Portal provides Government Administrators access to the trouble ticketing system enabling them to report, update, and view status of service incidents. The Administrators can review all open and closed requests specific to their Agency. The ticketing system also provides relevant documentation relating to their request including administrative and technical help and knowledgebase articles. The Smartronix ONE Agency Portal provides web service based API access to the trouble ticketing system via authenticated REST calls and RSS feeds for ticket input, status, resolution, and summaries. The API is specifically targeted for integration with existing Agency Ticketing Systems.

Message size limitations for both send and receive will be configurable via the Smartronix ONE Agency Portal based on individual customer requirements while maintaining the stated requirement of 25MB. Recipient count limit will be enforced unless it is dictated by a customer and at least 500 recipients per day will be supported.

Office Automation

The Smartronix ONE Platform supplements Microsoft Exchange Server 2010 and Microsoft Lync Server 2010 with Microsoft SharePoint 2010 Enterprise, Microsoft Office Professional Plus, and Microsoft Office Web Apps. Microsoft SharePoint 2010 Enterprise is the most robust enterprise collaboration platform in the market today, while Microsoft Office Professional Plus is the dominant application suite for the creation and editing of professional quality documents, spreadsheets, and presentations. Microsoft Office Web Apps extends these traditional Microsoft Office applications with web-based version that can be accessed through any supported web browser including smart phone mobile browsers. By enabling a full SharePoint 2010 Enterprise enclave, the Smartronix ONE Platform allows agencies to independently tailor their cloud solution in the following ways:

- Complex application development

- Integration with a wide range of external data sources

- Basic records management capabilities

- Automation of Office applications

- Reporting and business intelligence

- Excel Services and PowerPivot

- Advanced search capabilities

- Enterprise search of external data sources

Smartronix ONE Platform enables users to access collaboration and office automation through a variety of thin clients and smart clients. Users can access their office automation and collaboration tools through supported web browsers including Internet Explorer, Firefox, Safari, and Chrome. They can also access mobile web sites via supported mobile browsers on leading smart phones. Microsoft Office applications including Word, Excel, PowerPoint, Outlook, OneNote, Publisher, Access, InfoPath, and SharePoint Workspaces integrate seamlessly with the Smartronix ONE Platform cloud services.

Migration

Smartronix *ZeroImpact* e-mail migration approach combines technical expertise and key technology enabling components coupled with our philosophy of providing a seamless, transparent user migration. A key tenet of our migration service is a seamless user experience by employing a technical solution that provides uninterrupted access to a full complement of messaging functionality during the migration process. Smartronix *ZeroImpact* migration model provides a seamless user experience during their migration. *ZeroImpact* migration allows for groups of users to be moved onto the new ONE Platform (e.g. user message stores, calendar, addresses) while maintaining complete interaction with their counterparts in the source email system – with no degradation of services. Creating this high level of interaction is accomplished by integrating Smartronix' ONE Platform with the customer's source mail system to facilitate the synchronization of message stores, user mailbox folder structure, calendar event updates/notifications, and address lists, even between different email vendors. This Co-existence technology facilitates the interaction between these two systems for the duration of the migration process. Co-existence tools and the systems required to run them during the migration will be provided by the Smartronix migration team and will reside at the Ordering Activity's premise during the entire migration process. The actual Co-existence tools deployed will vary by each organization and the Legacy systems deployed within their organization.

Smartronix ONE Platform, a combination of Exchange 2010, Lync 2010, BES, SharePoint 2010 Enterprise, Office Professional Plus, and Office Web Apps meets all of the requirements for Office Automation to include collaborative document-authoring and document-versioning for documents, spreadsheets, and presentations, presence, intranets, user-generated content, wikis, web conferencing, video chatting, SMS and fax communications, VOIP integration, and common APIs. Our ONE Platform is a seamless integrated suite of web-based applications with which most government user will be highly familiar. More importantly, the Smartronix ONE Platform significantly exceeds the capabilities of most SaaS solutions such as Office 365, BPOS, and Google Apps because these solutions were generically designed for the broad market rather than the unique needs of government.

Beyond the messaging capabilities of Exchange and Lync, the Smartronix ONE Platform is providing agencies interested in office automation with SharePoint 2010 Enterprise plus Office Web Apps running in the cloud. SharePoint is one of the most powerful and widely adopted platforms in the Federal Government for custom application development, collaboration, and business intelligence. And beyond SharePoint, the Smartronix ONE Platform provides licenses to Microsoft Office Professional Plus, which forms a seamless solution with the cloud-based capabilities of the platform

Summary

When compared to one-size-fits-all SaaS solutions such as standard Office 365 or Google Apps, the advantage of the Smartronix ONE Platform is in providing all the features and flexibility of enterprise applications in a secure cloud environment. Also, in order to power this approach, we feel strongly that a world-class SaaS platform requires a "true cloud" underlying infrastructure. You cannot meet the complex requirements of the Federal government with a static non-elastic infrastructure nor can you realize the economic benefits without using a global scale IaaS provider.

Our solution relies on Terremark's managed cloud infrastructure, which spans multiple datacenters and currently provides critical IaaS to several large federal entities. Providing bulletproof connectivity into the Terremark cloud, Verizon is one of the few Trusted Internet Connection (TIC) providers and is the largest

federal communications provider. This ensures that our communications backbone is one of the largest and broadest available in the US, enabling a wide variety of service provisioning locations.

The Smartronix ONE Platform infrastructure includes Terremark managed cloud datacenters in Culpeper, Virginia and Miami, Florida. Verizon dedicated internet connections connects the managed cloud data centers, providing "active-active" redundancy. In other words, in addition to the logical and physical redundancy within each cloud datacenter, even if one cloud data center were to suffer a complete failure, users would not experience any loss of service because the other cloud data center would provide instant redundancy.

In summary, the solution enables a fully customized, highly integrated Email as a Service collaboration platform that resides on a highly extensible, highly available federal cloud infrastructure.

SMARTRONIX, INC. SPECIAL ITEM NUMBER 132-52, ELECTRONIC COMMERCE (EC) - CLOUD COMPUTING

EMAIL AS A SERVICE (EaaS) / SOFTWARE AS A SERVICE (SaaS) - PRICE INCLUDES IFF

SIN	Order Number	Email-as-a-Service - Government Community Cloud	Unit of Measure	Effective 8/4/11 - 8/3/13	Effective 8/4/13 - 8/3/14	Effective 8/4/14 - 8/3/15	Effective 8/4/15 - 8/3/16	Effective 8/4/15 - 8/3/17	Effective 8/4/15 - 8/3/18	Effective 8/4/15 - 4/6/19
132-52	EM001	Mailbox Tier 1 (<10K Mbox)	per Mailbox per month	$ 35.25	$ 36.31	$ 37.39	$ 38.52	$ 39.67	$ 40.86	$ 42.09
132-52	EM002	Mailbox Tier 2 (10K-50K Mbox)	per Mailbox per month	$ 23.64	$ 24.35	$ 25.08	$ 25.83	$ 26.60	$ 27.40	$ 28.22
132-52	EM003	Mailbox Tier 3 (>50K Mbox)	per Mailbox per month	$ 17.50	$ 18.03	$ 18.57	$ 19.12	$ 19.70	$ 20.29	$ 20.90
132-52	EM004	Additional GB Mailbox Storage Tier 1 (<10K Mbox)	per GB per month	$ 0.53	$ 0.54	$ 0.56	$ 0.58	$ 0.59	$ 0.61	$ 0.63
132-52	EM005	Additional GB Mailbox Storage Tier 2 (10K-50K Mbox)	per GB per month	$ 0.38	$ 0.39	$ 0.40	$ 0.41	$ 0.43	$ 0.44	$ 0.45
132-52	EM006	Additional GB Mailbox Storage Tier 3 (>50K Mbox)	per GB per month	$ 0.29	$ 0.30	$ 0.31	$ 0.32	$ 0.33	$ 0.34	$ 0.35
132-52	EM007	Archiving per Mailbox/Month Tier 1 (<10K Mbox)	per Mailbox per month	$ 1.51	$ 1.56	$ 1.60	$ 1.65	$ 1.70	$ 1.75	$ 1.80
132-52	EM008	Archiving per Mailbox/Month Tier 2 (10K-50K Mbox)	per Mailbox per month	$ 1.01	$ 1.04	$ 1.07	$ 1.10	$ 1.13	$ 1.17	$ 1.20
132-52	EM009	Archiving per Mailbox/Month Tier 3 (>50K Mbox)	per Mailbox per month	$ 0.76	$ 0.78	$ 0.80	$ 0.83	$ 0.85	$ 0.88	$ 0.90
132-52	EM010	Additional GB of Archiving Storage Tier 1 (<10K Mbox)	per GB per month	$ 0.22	$ 0.23	$ 0.23	$ 0.24	$ 0.25	$ 0.25	$ 0.26
132-52	EM011	Additional GB of Archiving Storage Tier 2 (10K - 50K Mbox)	per GB per month	$ 0.15	$ 0.15	$ 0.16	$ 0.16	$ 0.17	$ 0.17	$ 0.18
132-52	EM012	Additional GB of Archiving Storage Tier 3 (>50K Mbox)	per GB per month	$ 0.10	$ 0.11	$ 0.11	$ 0.11	$ 0.12	$ 0.12	$ 0.12
132-52	EM013	Blackberry Enterprise Server per Mailbox/Month Tier 1 (<10K Mbox)	per Mailbox per month	$ 10.08	$ 10.38	$ 10.69	$ 11.01	$ 11.34	$ 11.68	$ 12.03
132-52	EM014	Blackberry Enterprise Server per Mailbox/Month Tier 2 (10K-50K Mbox)	per Mailbox per month	$ 8.56	$ 8.82	$ 9.09	$ 9.36	$ 9.64	$ 9.93	$ 10.23
132-52	EM015	Blackberry Enterprise Server per Mailbox/Month Tier 3 (>50K Mbox)	per Mailbox per month	$ 7.05	$ 7.26	$ 7.48	$ 7.71	$ 7.94	$ 8.18	$ 8.42

SIN	Order Number	Email-as-a-Service - Government Private Cloud	Unit of Measure	Effective 8/4/11 - 8/3/13	Effective 8/4/13 - 8/3/14	Effective 8/4/14 - 8/3/15	Effective 8/4/15 - 8/3/16	Effective 8/4/15 - 8/3/17	Effective 8/4/15 - 8/3/18	Effective 8/4/15 - 4/6/19
132-52	EM016	Mailbox Tier 1 (<10K Mbox)	per Mailbox per month	$ 40.69	$ 41.91	$ 43.17	$ 44.46	$ 45.80	$ 47.17	$ 48.59
132-52	EM017	Mailbox Tier 2 (10K-50K Mbox)	per Mailbox per month	$ 24.31	$ 25.04	$ 25.80	$ 26.57	$ 27.37	$ 28.19	$ 29.03
132-52	EM018	Mailbox Tier 3 (>50K Mbox)	per Mailbox per month	$ 17.85	$ 18.39	$ 18.94	$ 19.51	$ 20.09	$ 20.69	$ 21.31
132-52	EM019	Additional GB Mailbox Storage Tier 1 (<10K Mbox)	per GB per month	$ 0.58	$ 0.59	$ 0.61	$ 0.63	$ 0.65	$ 0.67	$ 0.69
132-52	EM020	Additional GB Mailbox Storage Tier 2 (10K-50K Mbox)	per GB per month	$ 0.39	$ 0.40	$ 0.41	$ 0.42	$ 0.44	$ 0.45	$ 0.46
132-52	EM021	Additional GB Mailbox Storage Tier 3 (>50K Mbox)	per GB per month	$ 0.30	$ 0.31	$ 0.32	$ 0.32	$ 0.33	$ 0.34	$ 0.35
132-52	EM022	Archiving per Mailbox/Month Tier 1 (<10K Mbox)	per Mailbox per month	$ 3.02	$ 3.11	$ 3.21	$ 3.30	$ 3.40	$ 3.50	$ 3.61
132-52	EM023	Archiving per Mailbox/Month Tier 2 (10K-50K Mbox)	per Mailbox per month	$ 2.77	$ 2.85	$ 2.94	$ 3.03	$ 3.12	$ 3.21	$ 3.31
132-52	EM024	Archiving per Mailbox/Month Tier 3 (>50K Mbox)	per Mailbox per month	$ 2.52	$ 2.59	$ 2.67	$ 2.75	$ 2.84	$ 2.92	$ 3.01
132-52	EM025	Additional GB of Archiving Storage Tier 1 (<10K Mbox)	per GB per month	$ 0.24	$ 0.25	$ 0.25	$ 0.26	$ 0.27	$ 0.28	$ 0.28
132-52	EM026	Additional GB of Archiving Storage Tier 2 (10K - 50K Mbox)	per GB per month	$ 0.16	$ 0.17	$ 0.17	$ 0.18	$ 0.18	$ 0.19	$ 0.19
132-52	EM027	Additional GB of Archiving Storage Tier 3 (>50K Mbox)	per GB per month	$ 0.11	$ 0.12	$ 0.12	$ 0.12	$ 0.13	$ 0.13	$ 0.13
132-52	EM028	Blackberry Enterprise Server per Mailbox/Month Tier 1 (<10K Mbox)	per Mailbox per month	$ 10.08	$ 10.38	$ 10.69	$ 11.01	$ 11.34	$ 11.68	$ 12.03
132-52	EM029	Blackberry Enterprise Server per Mailbox/Month Tier 2 (10K-50K Mbox)	per Mailbox per month	$ 8.56	$ 8.82	$ 9.09	$ 9.36	$ 9.64	$ 9.93	$ 10.23
132-52	EM030	Blackberry Enterprise Server per Mailbox/Month Tier 3 (>50K Mbox)	per Mailbox per month	$ 7.05	$ 7.26	$ 7.48	$ 7.71	$ 7.94	$ 8.18	$ 8.42

SIN	Order Number	Email-as-a-Service - Government Secret Cloud	Unit of Measure	Effective 8/4/11 - 8/3/13	Effective 8/4/13 - 8/3/14	Effective 8/4/14 - 8/3/15	Effective 8/4/15 - 8/3/16	Effective 8/4/15 - 8/3/17	Effective 8/4/15 - 8/3/18	Effective 8/4/15 - 4/6/19
132-52	EM031	Mailbox Tier 1 (<10K Mbox)	per Mailbox per month	$ 141.14	$ 145.37	$ 149.74	$ 154.23	$ 158.85	$ 163.62	$ 168.53
132-52	EM032	Mailbox Tier 2 (10K-50K Mbox)	per Mailbox per month	$ 41.60	$ 42.85	$ 44.13	$ 45.46	$ 46.82	$ 48.23	$ 49.67
132-52	EM033	Mailbox Tier 3 (>50K Mbox)	per Mailbox per month	$ 22.84	$ 23.53	$ 24.23	$ 24.96	$ 25.71	$ 26.48	$ 27.27
132-52	EM034	Additional GB Mailbox Tier 1 (<10K Mbox)	per GB per month	$ 1.44	$ 1.49	$ 1.53	$ 1.58	$ 1.63	$ 1.67	$ 1.72
132-52	EM035	Additional GB Mailbox Tier 2 (10K-50K Mbox)	per GB per month	$ 0.75	$ 0.77	$ 0.80	$ 0.82	$ 0.85	$ 0.87	$ 0.90
132-52	EM036	Additional GB Mailbox Tier 3 (>50K Mbox)	per GB per month	$ 0.35	$ 0.36	$ 0.37	$ 0.38	$ 0.39	$ 0.40	$ 0.41
132-52	EM037	Archiving per Mailbox/Month Tier 1 (<10K Mbox)	per Mailbox per month	$ 3.74	$ 3.85	$ 3.96	$ 4.08	$ 4.20	$ 4.33	$ 4.46
132-52	EM038	Archiving per Mailbox/Month Tier 2 (10K-50K Mbox)	per Mailbox per month	$ 3.42	$ 3.53	$ 3.63	$ 3.74	$ 3.85	$ 3.97	$ 4.09
132-52	EM039	Archiving per Mailbox/Month Tier 3 (>50K Mbox)	per Mailbox per month	$ 3.11	$ 3.21	$ 3.30	$ 3.40	$ 3.50	$ 3.61	$ 3.72
132-52	EM040	Additional GB of Archiving Storage Tier 1 (<10K Mbox)	per GB per month	$ 0.55	$ 0.56	$ 0.58	$ 0.60	$ 0.62	$ 0.64	$ 0.65
132-52	EM041	Additional GB of Archiving Storage Tier 2 (10K - 50K Mbox)	per GB per month	$ 0.29	$ 0.29	$ 0.30	$ 0.31	$ 0.32	$ 0.33	$ 0.34
132-52	EM042	Additional GB of Archiving Storage Tier 3 (>50K Mbox)	per GB per month	$ 0.13	$ 0.14	$ 0.14	$ 0.14	$ 0.15	$ 0.15	$ 0.16

SIN	Order Number	Office Automation - Government Community Cloud	Unit of Measure	Effective 8/4/11 - 8/3/13	Effective 8/4/13 - 8/3/14	Effective 8/4/14 - 8/3/15	Effective 8/4/15 - 8/3/16	Effective 8/4/15 - 8/3/17	Effective 8/4/15 - 8/3/18	Effective 8/4/15 - 4/6/19
132-52	EM043	Office Automation SaaS Tier 1 (<10K Users)	per User per month	$ 34.56	$ 35.59	$ 36.66	$ 37.76	$ 38.89	$ 40.06	$ 41.26
132-52	EM044	Office Automation SaaS Tier 2 (10K-50K Users)	per User per month	$ 27.82	$ 28.66	$ 29.52	$ 30.40	$ 31.31	$ 32.25	$ 33.22
132-52	EM045	Office Automation SaaS Tier 3 (>50K Users)	per User per month	$ 26.53	$ 27.33	$ 28.15	$ 28.99	$ 29.86	$ 30.76	$ 31.68
132-52	EM046	Additional GB of Office Automation Storage Tier 1 (<10K Users)	per GB per month	$ 0.22	$ 0.23	$ 0.23	$ 0.24	$ 0.25	$ 0.25	$ 0.26
132-52	EM047	Additional GB of Office Automation Storage Tier 2 (10K - 50K Users)	per GB per month	$ 0.15	$ 0.15	$ 0.16	$ 0.16	$ 0.17	$ 0.17	$ 0.18
132-52	EM048	Additional GB of Office Automation Storage Tier 3 (>50K Users)	per GB per month	$ 0.10	$ 0.11	$ 0.11	$ 0.11	$ 0.12	$ 0.12	$ 0.12

SIN	Order Number	Office Automation - Government Private Cloud	Unit of Measure	Effective 8/4/11 - 8/3/13	Effective 8/4/13 - 8/3/14	Effective 8/4/14 - 8/3/15	Effective 8/4/15 - 8/3/16	Effective 8/4/15 - 8/3/17	Effective 8/4/15 - 8/3/18	Effective 8/4/15 - 4/6/19
132-52	EM049	Office Automation SaaS Tier 1 (<10K Users)	per User per month	$ 34.56	$ 35.59	$ 36.66	$ 37.76	$ 38.89	$ 40.06	$ 41.26
132-52	EM050	Office Automation SaaS Tier 2 (10K-50K Users)	per User per month	$ 27.82	$ 28.66	$ 29.52	$ 30.40	$ 31.31	$ 32.25	$ 33.22
132-52	EM051	Office Automation SaaS Tier 3 (>50K Users)	per User per month	$ 26.53	$ 27.33	$ 28.15	$ 28.99	$ 29.86	$ 30.76	$ 31.68
132-52	EM052	Additional GB of Office Automation Storage Tier 1 (<10K Users)	per GB per month	$ 0.24	$ 0.25	$ 0.25	$ 0.26	$ 0.27	$ 0.28	$ 0.28
132-52	EM053	Additional GB of Office Automation Storage Tier 2 (10K - 50K Users)	per GB per month	$ 0.16	$ 0.17	$ 0.17	$ 0.18	$ 0.18	$ 0.19	$ 0.19
132-52	EM054	Additional GB of Office Automation Storage Tier 3 (>50K Users)	per GB per month	$ 0.11	$ 0.12	$ 0.12	$ 0.12	$ 0.13	$ 0.13	$ 0.13

		SMARTRONIX, INC. SPECIAL ITEM NUMBER 132-52, ELECTRONIC COMMERCE (EC) - CLOUD COMPUTING								
		EMAIL AS A SERVICE (EaaS) / SOFTWARE AS A SERVICE (SaaS) - PRICE INCLUDES IFF								
SIN	Order Number	Office Automation - Government Secret Cloud	Unit of Measure	Effective 8/4/11 - 8/3/13	Effective 8/4/13 - 8/3/14	Effective 8/4/14 - 8/3/15	Effective 8/4/15 - 8/3/16	Effective 8/4/15 - 8/3/17	Effective 8/4/15 - 8/3/18	Effective 8/4/15 - 4/6/19
132-52	EM055	Office Automation SaaS Tier 1 (<10K	per User per month	$ 45.86	$ 47.23	$ 48.65	$ 50.11	$ 51.61	$ 53.16	$ 54.75
132-52	EM056	Office Automation SaaS Tier 2 (10K-5	per User per month	$ 36.92	$ 38.03	$ 39.17	$ 40.34	$ 41.55	$ 42.80	$ 44.09
132-52	EM057	Office Automation SaaS Tier 3 (>50K	per User per month	$ 35.21	$ 36.26	$ 37.35	$ 38.47	$ 39.63	$ 40.81	$ 42.04
132-52	EM058	Additional GB of Office Automation Sto	per GB per month	$ 0.55	$ 0.56	$ 0.58	$ 0.60	$ 0.62	$ 0.64	$ 0.65
132-52	EM059	Additional GB of Office Automation Sto	per GB per month	$ 0.29	$ 0.29	$ 0.30	$ 0.31	$ 0.32	$ 0.33	$ 0.34
132-52	EM060	Additional GB of Office Automation Sto	per GB per month	$ 0.13	$ 0.14	$ 0.14	$ 0.14	$ 0.15	$ 0.15	$ 0.16
SIN	Order Number	Migration Service - Government Community Cloud	Unit of Measure	Effective 8/4/11 - 8/3/13	Effective 8/4/13 - 8/3/14	Effective 8/4/14 - 8/3/15	Effective 8/4/15 - 8/3/16	Effective 8/4/15 - 8/3/17	Effective 8/4/15 - 8/3/18	Effective 8/4/15 - 4/6/19
132-52	EM061	On-Premise Executive Migration Service Tier 1 (<10K users)	per Mailbox	$ 344.41	$ 354.74	$ 365.38	$ 376.35	$ 387.64	$ 399.27	$ 411.24
132-52	EM062	On-Premise Executive Migration Service Tier 2 (10K-50K users)	per Mailbox	$ 295.78	$ 304.65	$ 313.79	$ 323.21	$ 332.90	$ 342.89	$ 353.18
132-52	EM063	On-Premise Executive Migration Service Tier 3 (>50K users)	per Mailbox	$ 280.12	$ 288.52	$ 297.18	$ 306.09	$ 315.28	$ 324.74	$ 334.48
132-52	EM064	Remote/Standard Service Migration Service Tier 1 (<10K users)	per Mailbox	$ 79.30	$ 81.68	$ 84.13	$ 86.65	$ 89.25	$ 91.93	$ 94.69
132-52	EM065	Remote/Standard Migration Service Tier 2 (10K-50K users)	per Mailbox	$ 49.70	$ 51.20	$ 52.73	$ 54.31	$ 55.94	$ 57.62	$ 59.35
132-52	EM066	Remote/Standard Migration Service Tier 3 (>50K users)	per Mailbox	$ 43.22	$ 44.52	$ 45.85	$ 47.23	$ 48.65	$ 50.11	$ 51.61
SIN	Order Number	Migration Service - Government Private Cloud	Unit of Measure	Effective 8/4/11 - 8/3/13	Effective 8/4/13 - 8/3/14	Effective 8/4/14 - 8/3/15	Effective 8/4/15 - 8/3/16	Effective 8/4/15 - 8/3/17	Effective 8/4/15 - 8/3/18	Effective 8/4/15 - 4/6/19
132-52	EM067	On-Premise Executive Migration Service Tier 1 (<10K users)	per Mailbox	$ 344.41	$ 354.74	$ 365.38	$ 376.35	$ 387.64	$ 399.27	$ 411.24
132-52	EM068	On-Premise Executive Migration Service Tier 2 (10K-50K users)	per Mailbox	$ 295.78	$ 304.65	$ 313.79	$ 323.21	$ 332.90	$ 342.89	$ 353.18
132-52	EM069	On-Premise Executive Migration Service Tier 3 (>50K users)	per Mailbox	$ 280.12	$ 288.52	$ 297.18	$ 306.09	$ 315.28	$ 324.74	$ 334.48
132-52	EM070	Remote/Standard Migration Service Tier 1 (<10K users)	per Mailbox	$ 79.30	$ 81.68	$ 84.13	$ 86.65	$ 89.25	$ 91.93	$ 94.69
132-52	EM071	Remote/Standard Migration Service Tier 2 (10K-50K users)	per Mailbox	$ 49.70	$ 51.20	$ 52.73	$ 54.31	$ 55.94	$ 57.62	$ 59.35
132-52	EM072	Remote/Standard Migration Service Tier 3 (>50K users)	per Mailbox	$ 43.22	$ 44.52	$ 45.85	$ 47.23	$ 48.65	$ 50.11	$ 51.61
SIN	Order Number	Migration Service - Government Secret Cloud	Unit of Measure	Effective 8/4/11 - 8/3/13	Effective 8/4/13 - 8/3/14	Effective 8/4/14 - 8/3/15	Effective 8/4/15 - 8/3/16	Effective 8/4/15 - 8/3/17	Effective 8/4/15 - 8/3/18	Effective 8/4/15 - 4/6/19
132-52	EM073	On-Premise Executive Migration Service Tier 1 (10K-50K users)	per Mailbox	$ 464.95	$ 478.90	$ 493.27	$ 508.07	$ 523.31	$ 539.01	$ 555.18
132-52	EM074	On-Premise Executive Migration Service Tier 2 (10K-50K users)	per Mailbox	$ 399.30	$ 411.28	$ 423.62	$ 436.33	$ 449.42	$ 462.90	$ 476.79
132-52	EM075	On-Premise Executive Migration Service Tier 3 (>50K users)	per Mailbox	$ 378.16	$ 389.51	$ 401.19	$ 413.23	$ 425.62	$ 438.39	$ 451.55
132-52	EM076	Remote/Standard Migration Service Tier 1 (10K-50K users)	per Mailbox	$ 107.06	$ 110.27	$ 113.57	$ 116.98	$ 120.49	$ 124.11	$ 127.83
132-52	EM077	Remote/Standard Migration Service Tier 2 (10K-50K users)	per Mailbox	$ 67.10	$ 69.11	$ 71.19	$ 73.32	$ 75.52	$ 77.79	$ 80.12
132-52	EM078	Remote/Standard Migration Service Tier 3 (>50K users)	per Mailbox	$ 58.35	$ 60.10	$ 61.90	$ 63.76	$ 65.67	$ 67.64	$ 69.67

1. Scope:

a. The labor categories, prices, terms and conditions stated under Special Item Number 132-56 Health Information Technology Services apply exclusively to Health IT Services within the scope of this Information Technology Schedule.

b. This SIN is limited to Health IT Services only. Software and hardware products are out of scope. Hardware and software can be acquired through different Special Item Numbers on IT Schedule 70 (e.g. 132-8).

c. This SIN provides ordering activities with access to Health IT services.

d. Health IT Services provided under this SIN shall comply with all Healthcare certifications and industry standards as applicable at the task order level.

e. 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) (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. Orders:

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 Professional/EC 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. Inspection of Services:

In accordance with FAR 52.212-4 CONTRACT TERMS AND CONDITIONS--COMMERCIAL ITEMS (MAR 2009) (DEVIATION I - FEB 2007) for Firm-Fixed Price orders and FAR 52.212-4 CONTRACT TERMS AND CONDITIONS −COMMERCIAL ITEMS (MAR 2009) (ALTERNATE I − OCT 2008) (DEVIATION I – FEB 2007) applies to Time-and-Materials and Labor-Hour Contracts orders placed under this contract.

6. 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 (Deviation – Dec 2007) Rights in Data – General, may apply.

7. 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/EC Services.

8. Independent Contractor:

All Health IT 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.

9. Organizational Conflict 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 placing9 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.

10. Invoices:

The Contractor, upon completion of the work ordered, shall submit invoices for Health 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.

11. 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. 52.216-3 (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—

        a.   The offeror;

        b.   Subcontractors; and/or

        c.   Divisions, subsidiaries or affiliates of the offeror under a common control.

12. Resumes:

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

13. 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.

14. Approval of Subcontractors:

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.

15. Description of Health IT Services and Pricing:

    a.   The Contractor shall provide a description of services of each type of Health IT Service offered under Special Item Numbers 132-56. Health IT 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 Health IT 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.

Order Number	Commercial Labor Category	Functional Responsibility	Experience Requirements	Educational Requirements
H001	Health IT Application Developer - Journeyman	Develops software requirements definition, design, development, testing, and documentation of application prototypes, utilities, and solutions across multiple healthcare software environments using full lifecycle methodologies. Leads and provides technical expertise required to support and advance health care application and system development and generation and maintenance of software systems. Ensures software systems are compatible and in compliance with the standards for open systems architectures as they apply to the implementation and specification of health care environments. Designs, develops, implements, tests and troubleshoots application prototypes, utilities, and solutions across multiple environments using full lifecycle methodologies. Performs feasibility analysis on potential future projects and evaluation and recommendation of application software packages, application integration, and testing tools. Researches, tests, builds, and coordinates the conversion and/or integration of new products based on healthcare client requirements. Gathers technical requirements and produces specifications and design documentation, including process flows, object/class models, sequence diagrams, system and SOA services interface specifications, data dictionaries, and data models.	5 years of application development experience and familiarity with different application environments.	Bachelor's degree in computer science, engineering, information technology, or related field of study.
H002	Health IT Application Developer - Senior	Provides technical leadership and direction for clinical software application development. Designs, develops, implements, tests, and troubleshoots application prototypes, utilities, and solutions across multiple healthcare environments, using full lifecycle methodologies. Troubleshoots production problems related to software applications. Researches, tests, builds, and coordinates the conversion and/or integration of new products based on client requirements. Plans, coordinates, and supervises all activities related to the design, development, and implementation of the organization's applications development and analysis function. Performs feasibility analysis on potential future projects to management. Gathers technical requirements through interview of client technical staff, review of technical documentation, and observation of system behavior. Produces specifications and design documentation, including process flows, object/class models, sequence diagrams, system and web services interface specifications, data	7 years of application development experience and familiarity with different application environments.	Bachelor's degree in computer science, engineering, information technology, or related field of study.

Order Number	Commercial Labor Category	Functional Responsibility	Experience Requirements	Educational Requirements
		dictionary, and/or data model, etc.		
H003	Health IT Clinical Information Systems Administrator Journeyman	Responsible for effective provisioning, installation/configuration, operation, and maintenance of clinical systems hardware and software and related infrastructure. This individual participates in technical research and development to enable continuing innovation within the infrastructure. This individual ensures that system hardware, operating systems, software systems, and related procedures adhere to organizational values, enabling staff, volunteers, and partners. Assist/leads project teams with technical issues in the initiation and planning phases of standard Project Management Methodology. These activities include the definition of needs, benefits, and technical strategy; research & development within the project lifecycle; technical analysis and design; and support of operations staff in executing, testing and rolling-out the solutions. Participation on projects is focused on smoothing the transition of projects from development staff to production staff by performing operations activities within the project lifecycle.	6 years of experience in the Health IT field or in a related area.	Bachelor's degree with a concentration in a healthcare field. 2 years of project-related experience may be substituted for each year short of the degree
H004	Health IT Clinical Information Systems Administrator Senior	Responsible for the technical design, planning, implementation, and the highest level of performance tuning and recovery procedures for mission-critical enterprise clinical systems. Serves as a technical expert in the area of system administration for complex operating systems. Recommends the redesign and configuration of operating systems and system applications. Investigates and analyzes feasibility of system requirements and develops system specifications. Identifies methods, solutions, and provides project leadership and management to provide high-level service to customers. Performs full supervision of Operations staff.	9 years of experience in the Health IT field or in a related area.	Bachelor's degree with a concentration in a healthcare field.
H005	Health IT Clinical Systems Architect	Develops and implements policies and procedures to ensure that systems support the organization's business requirements and meet the needs of end users. Defines systems requirements based on user/client needs, cost, and required integration with	12 years of experience related to Health IT field.	Bachelor's degree in computer science, engineering, information technology, or related field study.

Order Number	Commercial Labor Category	Functional Responsibility	Experience Requirements	Educational Requirements
		existing applications, systems, or platforms. Works collaboratively with users of clinical automated information systems and assists in analysis, problem solving, and business process re-engineering activities related to issues surrounding clinical automated information systems. Defines technical standards and functionality tests. Coordinates aspects of planning, design, training, implementation, communication, maintenance, and evaluation of existing or new functionality related to clinical automated information systems and serves as a clinical resource in the documentation, implementation, sustainment, and maintenance of the clinical automated information systems.		
H006	Health IT Computer Systems Analyst Journeyman	Analyzes and defines requirements for engineering, systems, business, and all other data processing requirements within a healthcare/clinical environment. Designs, develops, engineers, and implements solutions and maybe responsible for the implementation and development of improved system or software capabilities. Gathers and organizes technical information about an organization's mission goals and needs, existing Health IM/IT products and ongoing programs. Evaluates approved product and systems capabilities and develops solutions and performs daily supervision and direction to staff.	3 years of experience in the Health IT field or in a related area.	Bachelor's degree with a concentration in a healthcare field. 2 years of project-related experience may be substituted for each year short of the degree
H007	Health IT Computer Systems Analyst Senior	Analyzes and defines requirements for engineering, business, and all other data processing requirements within a healthcare/clinical environment. Designs, develops, engineers, and implements solutions and responsible for the implementation and development of improved system or software capabilities. Gathers and organizes technical information about an organization's mission goals and needs, existing Health IM/IT products and ongoing programs. Evaluates approved product capabilities and develops solutions and performs daily supervision and direction to staff.	8 years of experience, of which at least 6 years must be specialized experience in defining computer security requirements for high-level applications.	Bachelor's degree in computer science, engineering, information technology, or related field of study. 2 years of project-related experience may be substituted for each year short of the degree
H008	Health IT Data Analyst Journeyman	Assists in conducting, analyzing, and reporting on healthcare data. Provides internal reporting, and mapping data sets between various clinical healthcare systems. Reviews client data and preforms reconciliation and analysis of root cause and correction. Interfaces with supervisors in reviewing errors and operational status, tracking, and following up on data files received, processed, and submitted.	2 years of experience in Healthcare ADP systems analysis, design, and/or maintenance.	Associate's degree in information technology, computer science, or related field of study. 2 years of project-related experience may be substituted for each year short of the degree

Order Num ber	Commercial Labor Category	Functional Responsibility	Experience Requirements	Educational Requirements
		Responsible for ensuring data quality and appropriate data use to comply with HIPAA (Health Insurance Portability and Accountability Act) regulations.		
H009	Health IT Data Analyst Senior	Works on a variety of projects across the organization to help answer critical business questions and build information assets to support operational needs. Analyzes medical and data sets to discover pattern, test assumptions, and uncover new issues and areas of improvement. Gathers requirements; designs new reporting packages; creates technical specification documents; helps write the necessary query codes; and deploys and maintains these assets. Responsible for ensuring data quality and appropriate data use to comply with HIPAA regulations. Usually supervisor of teams of Analyst, projects, and specific data focus areas.	6 years of experience in Healthcare ADP systems analysis, design, and or maintenance.	Bachelor's degree in information technology, computer science, or related field of study. 2 years of project-related experience may be substituted for each year short of the degree
H010	Health IT Data Management Subject Matter Expert (SME)	Oversees and performs the gathering, analysis, and synthesis of information for various clinical and information systems across the enterprise. Leads the development of test plans, descriptions, and procedures; and reviews results to ensure compliance with specifications. Monitors and analyzes master data, key data, and master relationship data within the organization. Ensures data integrity in key systems, and maintains the processes to support the data quality while identifying areas for data quality improvements. Ensures quality of master data in key systems, and develops and documents processes with other functional data owners to support ongoing maintenance and data integrity. In collaboration with SMEs and data stewards, defines and implements data strategy, policies, controls, and programs to ensure the enterprise data is accurate, complete, secure, and reliable. Provides assistance in resolving data quality problems through the appropriate choice of error detection and correction, process control and improvement, or process design strategies collaborating with SMEs and data stewards. Manages, analyzes, and resolves data initiative issues and manages revisions needed to best meet internal and customer requirements while adhering to published data standards. Assists in data management, governance, and data quality of master data requirements with other functional data owners to ensure functional master data integrity across the operational systems is consistent and meets stated	10 years of related progressive experience with demonstrated proficiency and understanding and/or training related to the position.	Bachelor's degree in computer science, engineering, information technology, or related field of study.

Order Number	Commercial Labor Category	Functional Responsibility	Experience Requirements	Educational Requirements
		business rules and requirements. Works closely with the business/IT to ensure alignment of master data rules and the operations of the application meet all requirements.		
H011	Health IT Program Manager Journeyman	Manages contract support operations for complex, mission-critical, and strategic programs which may involve multiple projects and groups of personnel at multiple locations. Utilizes proven leadership skills to organize, direct, and deploy resources with broad technical, business, and industry expertise. Program area typically represents more than three functional areas such as engineering, systems analysis, quality control, and administration. Responsible for a project's schedule and resource management. Directs the completion of projects and applies experience in Health IT systems development and implementation, enterprise architecture, performance management, risk management, or other related services. Interacts with the client on project-related issues and directs communication across the project and with key stakeholders. Reports to internal management and customer representatives. Oversees program budget, schedules and all aspect of financial management of the program. Effectively manages funds, personnel, production standards, and resources (equipment and facilities) and ensures quality and timely delivery of all contractual items. Serves as focal point of contract with client regarding all program activities. In general, work complexity and responsibility will be greater at higher levels.	8 years working in program management or related field.	Bachelor's degree in computer science, engineering, information technology, or related field of study.
H012	Health IT Program Manager Senior	Manages contract support operations for complex, mission-critical, and strategic programs which may involve multiple projects and groups of personnel at multiple locations. Utilizes proven leadership skills to organize, direct, and deploy resources with broad technical, business, and industry expertise. Program area typically represents more than three functional areas such as engineering, systems analysis, quality control, and administration. Responsible for a project's schedule and resource management. Directs the completion of projects and applies experience in Health IT systems development and implementation, enterprise architecture, performance management, risk management, or other related services. Interacts with the client on project-related issues and directs communication across the project and with	10 years working in program/project management or related field.	Bachelor's degree in computer science, engineering, information technology, or related field of study.

Order Num ber	Commercial Labor Category	Functional Responsibility	Experience Requirements	Educational Requirements
		key stakeholders. Reports to internal management and customer representatives. Oversees program budget, schedules and all aspect of financial management of the program. Effectively manages funds, personnel, production standards, and resources (equipment and facilities) and ensures quality and timely delivery of all contractual items. Serves as focal point of contract with client regarding all program activities. In general, work complexity and responsibility will be greater at higher levels		
H013	Health IT Task Manager	PPerforms day-to-day management of delivery order projects, from original concept through final implementation. Utilizes proven skills in those technical areas addressed by the delivery order to analyze new and complex project related problems and create innovative solutions involving financial management, scheduling, technology, methodology, tools, and solution components. Organizes, directs, and coordinates the planning and production of all activities associated with assigned delivery order projects. Defines project scope and objectives including developing detailed work plans, schedules, project estimates, resource plans, status reports, and project and financial tracking and analysis. Conducts project meetings and ensures quality standards. Provides technical and strategic guidance to project team and reviews project deliverables. In general, work complexity and responsibility will be greater at higher levels.	8 years of experience managing complex projects	Bachelor's degree in computer science, engineering, information technology, or related field of study.
H014	Health IT Systems Analyst Journeyman	Ensures information systems, products, and services meet minimum organizational standards and end-user requirements. Responsibilities may require developing new or improved techniques and procedures relating to systems development and operations, procedures dealing with resources and facilities management, database planning and design, systems analysis and design, network services, programming, conversion and implementation support, network services project management, and data/records management within a healthcare/clinical environment. Reports progress on problem resolution to Senior Healthy IT Analysts. Devises improvements to current IT procedures and develops models of possible future configurations.	4 years of experience in the Health IT field or in a related area.	Bachelor's degree in computer science, engineering, information technology, or a related field of study.
H015	Health IT Systems Analyst Senior	Develops functional requirements and creates functional and technical specifications to design applications to meet	7 years of experience in the Health IT field or	Bachelor's degree in computer science, engineering, information

Order Number	Commercial Labor Category	Functional Responsibility	Experience Requirements	Educational Requirements
		customers' complex business requirements within a healthcare/clinical environment. Supervises development, programming, testing, documentation, and implementation of applications. Supports highly complex designs and performs analytical and programming tasks. Provides structured system development methodologies and structured analysis and design techniques.	in a related area.	technology, or related field of study.
H016	Health IT Cyber Engineer Journeyman	Secures enterprise clinical information by determining security requirements; planning, implementing, and testing security systems; and preparing security standards, policies, and procedures. Verifies security systems by developing and implementing test scripts. Maintains security by monitoring and ensuring compliance to standards, policies, and procedures; conducting incident response analyses; and developing and conducting training programs. Upgrades security systems by monitoring security environment, identifying security gaps, and evaluating and implementing enhancements. Prepares system security reports by collecting, analyzing, and summarizing data and trends. Monitors, evaluates, and maintains systems and procedures to protect the data systems and databases from unauthorized users. Identifies potential threats and responds to reported security violations. Determines causes of security breaches. Researches, recommends, and implements changes to procedures to protect data from future violations. Assists in educating users on security procedures.	5 years of networking and/or application security experience and familiarity with different networking, clinical systems, or application environments.	Bachelor's degree in computer science, engineering, information technology, or related field of study.
H017	Health IT Cyber Engineer Senior	Secures enterprise clinical information by determining security requirements; planning, implementing, and testing security systems; and preparing security standards, policies, and procedures. Serves as an expert in monitoring, evaluating, and maintaining systems and procedures to protect the data systems. Plans security systems by evaluating network and security technologies; and developing requirements for local area networks (LANs), wide area networks (WANs), virtual private networks (VPNs), routers, firewalls, and related security and network devices. Designs public key infrastructures (PKIs), including use of certification authorities (CAs) and adhering to industry standards. Implements security systems by specifying intrusion detection methodologies and equipment; directing equipment and software installation and calibration; preparing preventive and	7 years of networking and/or application security experience and familiarity with different networking, clinical systems, or application environments.	Bachelor's degree in computer science, engineering, information technology, or related field of study.

Order Number	Commercial Labor Category	Functional Responsibility	Experience Requirements	Educational Requirements
		reactive measures; creating, transmitting, and maintaining keys; providing technical support; and completing documentation. Identifies potential threats and responds to reported security violations. Determines causes of security breaches. Researches, recommends, and implements changes to procedures to protect data from future violations. Determines security requirements by evaluating business strategies and requirements; researching information security standards; conducting system security and vulnerability analyses and risk assessments; studying architecture/platform; identifying integration issues; and preparing cost estimates.		
H018	Health IT Functional SME Senior	Applies extensive experience supporting large projects related to the individual's area of expertise. Expertise in functional domains such as clinical information, finance, and acquisition, etc. Provides functional and business expertise in clinical functionality software systems. Performs research, collection, collation, and compilation of data; and prepares inputs into larger reports. Evaluates and interprets findings. Prepares finished products for review by Team Leader or higher-level Analysts. Interfaces with external entities to collect data. Uses and/or develops computer tools to facilitate analysis tasks. Prepares monthly status reports. Prepares and delivers presentations to colleagues, subordinates, and Government representatives. Assures the proper use of current or requested programming, testing and documentation techniques. Produces, reviews, and documents reflecting knowledge of areas as required.	10 years applied experience in specific area of expertise, to include functional experience with relevant processes and systems.	Master's degree in a recognized scientific, managerial, business, or other discipline related to area of expertise.
H019	Health IT Technical SME Journeyman	Serves as a technical SME in areas relevant to clinical/health technology projects. Produces/reviews substantive and/or complex technical documentation reflecting detailed knowledge of technical areas. Develops requirements from a project's inception to its conclusion within a healthcare/clinical environment for simple to moderately complex systems. Assists other Senior Consultants with analysis and evaluation and the preparation of recommendations for system improvements, optimization, development, and/or maintenance efforts in the following specialties: information systems architecture; networking; telecommunication; automation; communications protocols; risk management/electronic analysis; software; lifecycle management; software	10 years of intensive and progressive experience in the individual's field of study and specialization.	Bachelor's degree in computer science, information systems, engineering, business, or other technically related discipline.

Order Number	Commercial Labor Category	Functional Responsibility	Experience Requirements	Educational Requirements
		development methodologies; and modeling and simulation. Provides documentation for software acquisition best practices, systems design, system engineering best practices, system architecture, feasibility studies, risk assessment/management, configuration management, quality assurance, measurements/metrics, cost estimation, earned value, project planning and monitoring, implementation planning, system specifications, programming, computer system security, tool assessments, technology assessments, market surveys, and training.		
H020	Health IT Technical SME Senior	Senior technical SME in areas relevant to clinical/health projects. Demonstrated experience and ability to provide enterprise-wide technical management and direction for problem definition, analysis and requirements development, and implementation for complex clinical/health systems in the subject matter area. Confers with client executive management using industry expertise to define the client's strategic enterprise clinical/health IT goals, and advises in the reengineering of high-level organizational processes to meet these goals. Produces/reviews substantive and/or complex technical documentation reflecting detailed knowledge of technical areas. Documentation subjects shall include (but not be limited to): software acquisition best practices, systems design, system engineering best practices, system architecture, feasibility studies, risk assessment/management, configuration management, quality assurance, measurements/metrics, cost estimation, earned value, project planning and monitoring, implementation planning, system specifications, programming, computer system security, tool assessments, technology assessments, market surveys, and training. Provides workable recommendations and advice to client executive management on emerging clinical/health technology, system improvements, optimization and maintenance.	12 years of intensive and progressive experience (within the past 15 years) in the individual's field of study.	Master's degree in computer science, engineering, information technology, or related field of study.

Order Number	Commercial Labor Category	Functional Responsibility	Experience Requirements	Educational Requirements
H021	Health IT Systems Engineer Journeyman	Responsible for enterprise planning and engineering of an organization's clinical health systems and infrastructure. Implements and designs of hardware and software. Designs system and process solutions in terms of design requirements that satisfy functional architecture; and defines and integrates the system and physical (hardware and software) architecture. Defines the system elements for each logical set of functional and performance requirements; determines design completeness; refines physical and communications interfaces; and defines system alternatives. Develops detailed product and process solutions that enable design verification and provides the basis for specification trees, work breakdown structures, and progressive definitions of specification and configuration baselines. Delivers technology engineering management plans, monitors schedule execution, integrates/develops recommendations for corrective and remedial action; and prepares status reports reflecting engineering/technical milestones.	6 years of experience in the Health IT field or in a related area.	Bachelor's degree in computer science, engineering, information technology, or related field of study.
H022	Health IT Telecom Engineer Journeyman	Responsible for assisting with telecommunication system/equipment design, system integration, technical management, and direct interface with customer management personnel for the solution of emergent clinical/health technology engineering and technical problems. Evaluates and develops technical input to the clinical/health systems engineering process. Identifies customer/user needs and objectives; and defines requirements, including missions, measures of effectiveness, use environments, and constraints. Assists with requirements analysis for systems missions and environments to identify functional definitions and designs for clinical/health system hardware and software architecture. Defines performance and design constraints. Provides Tier III level technical support to customers and supports design of new implementations or solutions.	5 years of experience in the Telecommunications field.	Bachelor's degree in computer science, electronics engineering, or other engineering discipline. 2 years of project-related experience may be substituted for each year short of the degree

Order Number	Commercial Labor Category	Functional Responsibility	Experience Requirements	Educational Requirements
H023	Health IT Telecom Engineer Senior	Oversees the telecom engineering activities. Develops clinical health technology engineering management plans, monitors execution, and integrates/develops recommendations for new and/or corrective and remedial action. Prepares status reports reflecting engineering/technical milestones, progress, and problems; and provides technical guidance and expertise to other personnel. Reviews and prioritizes network needs and analyzes project costs and feasibility. Develops network analysis standards and methodology consistent with technical requirements. Reviews recommendations for network improvement. Oversees deployment, configuration management, and operations of the full spectrum of network management tools throughout a large-scale enterprise network. Performs advanced analysis, diagnosis, and resolution of telecommunications problems for a variety of end users and systems. Provides recommendations and implement corrective actions to increase effectiveness of organizational and technology solutions. Provides recommendations to management team to increase effectiveness of organization and technology solutions. Mentors staff in their assigned duties to achieve highest standards.	8 years of experience in the Telecommunications field.	Bachelor's degree in computer science, electronics Engineering, or other engineering or technical discipline. 2 years of project-related experience may be substituted for each year short of the degree
H024	Health IT Training Manager (Systems Trainer)	Develops outlines, narratives, and/or storyboards from source materials in the health IT environment; and identifies graphics, videos, photographs, and/or narrations to be used for training and program development. Performs individual and classroom training for the use of computer hardware and software that translate health analytics into viable data. May be responsible for supervising and/or training those with less experience.	5 years of experience in the Health IT field as it relates to systems training.	Bachelor's degree in technical related field.

SIN	Order Number	Labor Category Title	Effective 4/6/14 - 4/5/15	Effective 4/6/15 - 4/5/16	Effective 4/6/16 - 4/5/17	Effective 4/6/17 -4/5/18	Effective 4/6/18 -4/5/19
132-56	H001	Health IT Application Developer Journeyman	-	-	-	$117.39	$ 119.74
132-56	H002	Health IT Application Developer Senior	-	-	-	$124.21	$ 126.69
132-56	H003	Health IT Clinical Information Systems Administr	-	-	-	$118.12	$ 120.48
132-56	H004	Health IT Clinical Information Systems Administr	-	-	-	$130.12	$ 132.72
132-56	H005	Health IT Clinical Systems Architect	-	-	-	$160.50	$ 163.71
132-56	H006	Health IT Computer Systems Analyst Journeyma	-	-	-	$115.16	$ 117.46
132-56	H007	Health IT Computer Systems Analyst Senior	-	-	-	$126.39	$ 128.92
132-56	H008	Health IT Data Analyst Junior	-	-	-	$47.59	$ 48.54
132-56	H009	Health IT Data Analyst Senior	-	-	-	$71.55	$ 72.98
132-56	H010	Health IT Data Management Subject Matter Expe	-	-	-	$152.71	$ 155.76
132-56	H011	Health IT Program Manager Journeyman	-	-	-	$126.73	$ 129.26
132-56	H012	Health IT Program Manager Senior	-	-	-	$171.47	$ 174.90
132-56	H013	Health IT Task Manager	-	-	-	$152.49	$ 155.54
132-56	H014	Health IT Systems Analyst Journeyman	-	-	-	$113.79	$ 116.07
132-56	H015	Health IT Systems Analyst Senior	-	-	-	$113.87	$ 116.15
132-56	H016	Health IT Cyber Engineer Journeyman	-	-	-	$153.37	$ 156.44
132-56	H017	Health IT Cyber Engineer Senior	-	-	-	$166.38	$ 169.71
132-56	H018	Health IT Functional SME Senior	-	-	-	$149.06	$ 152.04
132-56	H019	Health IT Technical SME Journeyman	-	-	-	$125.35	$ 127.86
132-56	H020	Health IT Technical SME Senior	-	-	-	$175.20	$ 178.70
132-56	H021	Health IT Systems Engineer Journeyman	-	-	-	$134.80	$ 137.50
132-56	H022	Health IT Telecom Engineer Journeyman	-	-	-	$106.50	$ 108.63
132-56	H023	Health IT Telecom Engineer Senior	-	-	-	$126.42	$ 128.95
132-56	H024	Health IT Training Manager (Systems Trainer)	-	-	-	$102.37	$ 104.42

TERMS AND CONDITIONS APPLICABLE TO PURCHASE OF CLOUD COMPUTING SERVICES (SPECIAL ITEM NUMBER 132 40)

****NOTE: If offering related IT Professional Services over and above initial onboarding and training, reference SIN 132-51, per Guidance to Ordering Activities on Professional services below.

****NOTE: This new SIN presents a clear way for Contractors to provide cloud computing services according to NIST definitions and principles within the scope of today's technology and standards with a secondary goal of accommodating ongoing technical advances in cloud computing.

1. SCOPE

The prices, terms and conditions stated under Special Item Number (SIN) 132-40 Cloud Computing Services apply exclusively to Cloud Computing Services within the scope of this Information Technology Schedule.

This SIN provides ordering activities with access to technical services that run in cloud environments and meet the NIST Definition of Cloud Computing Essential Characteristics. Services relating to or impinging on cloud that do not meet all NIST essential characteristics should be listed in other SINs.

The scope of this SIN is limited to cloud capabilities provided entirely as a service. Hardware, software and other artifacts 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 on premise cloud functionality, through combining different services on other IT Schedule 70 SINs (e.g. 132-51).

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]
- 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	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. 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. 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.

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[1] **Offerors may optionally select te 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 model.**

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".

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	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

#	Description Requirement	Reporting Type	Instructions
	no sub-category.		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 Schedule 70, 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 professional services related to the offering such as integration, migration, and other cloud professional services are out of scope for this SIN.

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 Schedule 70 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.

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[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")**

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.

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 800-122[4] and OMB memos M-06-16[5] and M-

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[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

07-16[6.] 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.

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.

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[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

- 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.

l. Related Professional Services

Ordering activities should engage with Contractors to discuss the availability of limited assistance with initial setup, training and access to the services that may be available through this SIN.

Any additional substantial and ongoing professional services related to the offering such as integration, migration, and other cloud professional services are out of scope for this SIN. Ordering activities should consult the appropriate GSA professional services schedule.

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 800-145[7].

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.

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[7] **http://csrc.nist.gov/publications/nistpubs/800-145/SP800-145.pdf**

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.

Table 3: Guidance on Meeting NIST Essential Characteristics

Characteristic	Capability	Guidance
On-demand self-service	• Ordering activities can directly provision services without requiring Contractor intervention. • This characteristic is typically implemented via a service console or programming interface for provisioning	Government procurement guidance varies on how to implement on-demand provisioning at this time. 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. 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: • 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	• Ordering activities	• Broad network access must be available without

Characteristic	Capability	Guidance
Access	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	significant qualification and in relation to the deployment model and security domain of the service • 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	• Pooling distinguishes cloud services from offsite hosting. • Ordering activities draw resources from a common pool maintained by the Contractor • Resources may have general characteristics such as regional location	• The cloud service must draw from a pool of resources and provide an automated means for the Ordering Activity to dynamically allocate them. • 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 requirement • Similar concerns apply to software and platform models; automated provisioning from a pool is required • Ordering 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	• Rapid provisioning and de-provisioning commensurate with demand	• Rapid elasticity is a specific demand-driven case of self-service • Procurement 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.

Characteristic	Capability	Guidance
		• 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	• Measured service should be understood as a reporting requirement that enables an Ordering Activity to control their use in cooperation with self service	• 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 • Contractors must specify that measured service is available and the general sort of metrics and mechanisms available

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 3 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 3: Guidance on Mapping to NIST Service Models

Service Model	Guidance
Infrastructure as a Service (IaaS)	Select an IaaS model for service based equivalents of hardware appliances such as virtual machines, storage devices, routers and other physical devices. • 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. Examples of IaaS services include virtual machines, object storage, disk block storage, network routers and firewalls, software defined networks. 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.
Platform as a	Select a PaaS model for service based equivalents of complete or partial software

Service Model	Guidance
Service (PaaS)	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.

- 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.

Examples of complete PaaS services include:

- 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.

The essential characteristic of a complete PaaS is defined by the customer's ability to deploy a complete custom application directly on the platform.

PaaS includes partial services as well as complete platform services. Illustrative examples of individual platform enablers or components include:

- 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

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.

Note that both the partial and complete PaaS examples all have two things in

Service Model	Guidance
	common: • 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 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.
Software as a Service (SaaS)	Select a SaaS model for service based equivalents of software applications. • 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. 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. 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. 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.

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 4: 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.

Supplemental Terms and Conditions. The following terms and conditions apply to both Infrastructure Support (regardless of Provider) and to Professional/Managed Services Support.

1.   Limitations of Liability. In no event shall our liability in connection with this Agreement exceed the contract price.

2.   Use of the Infrastructure Support. Client will adhere to all Infrastructure Service Provider terms applicable to its use of the Infrastructure Service Provider's Service Offerings as though Client were contracting directly with the Infrastructure Service Provider. "Infrastructure Service Provider" shall mean AWS and/or Microsoft Azure as applicable.

3.   Security and Data Privacy. Without limiting the Infrastructure Service Provider terms or your obligations, we will implement reasonable and appropriate measures designed to help you secure your content against accidental or unlawful loss, access or disclosure. Our security measures will be at least as stringent as those used to protect our own data. However, we and our service suppliers will not be liable for unauthorized access (i.e., "hacking") into infrastructure we provide or your transmission facilities, premises or equipment, or for unauthorized third party access to data files, programs, procedures or information thereon, unless and only to the extent that such access is due to gross negligence or intentional misconduct.

4.   Effect of Termination. Upon any termination of an Infrastructure Service Support task order, Client will retain ownership of its Infrastructure Service Provider Account and all associated infrastructure that has been built on those accounts.

AWS Customer Access Terms – U.S. Federal Agencies

These AWS Customer Access Terms (the "**Access Terms**") govern your access to and use of the Services (as defined below) provided to you by your systems integrator, reseller, or services provider ("**Provider**"), and set out the additional rules, conditions and restrictions that apply to the entity you represent ("**you**") for use of the Services of Amazon Web Services LLC ("**AWS**") granted to you by Provider. In these Access Terms, "**we**", "**us**", or "**our**" means AWS and any of its affiliates. Please see Section 9 for definitions of certain capitalized terms used in these Access Terms.

1. Use of the Services.

1.1 Generally. You are provided access to the Services by your Provider. Your use of and access to the Services is governed by the agreement between you and Provider. These Access Terms supplement the terms of such agreement. AWS Service Level Agreements do not apply to your use of the Services. Your continued access to and use of the Services is conditioned on your compliance with all laws, rules, regulations, policies and instructions applicable to your use of the Services, including the Service Terms, the Acceptable Use Policy and the other Policies as defined in Section 9.

1.2 Account Keys. Provider may provide you with AWS account keys which will allow you to directly access the Services via their account. You are responsible for all activities that occur under these account keys, regardless of whether the activities are undertaken by you or a third party (including your employees, contractors or agents) and we are not responsible for unauthorized access to the account.

1.3 Third Party Materials. Through the use of Provider's AWS account, you may have access to Third Party Materials, such as software applications provided by third parties, which are made available directly to you by other companies or individuals under separate terms and conditions, including separate fees and charges. Your use of any Third Party Materials is at your sole risk.

2. Your Responsibilities

2.1 Your Materials. You are solely responsible for the development, content, operation, maintenance, and use of Your Materials. For example, you are solely responsible for:

(a) the technical operation of Your Materials, including ensuring that calls you make to any Service are compatible with then-current APIs for that Service;

(b) compliance of Your Materials with the Acceptable Use Policy, the other Policies, and the law;

(c) any claims relating to Your Materials;

(d) properly handling and processing notices sent to you (or any of your affiliates) by any person claiming that Your Materials violate such person's rights, including notices pursuant to the Digital Millennium Copyright Act;

(e) any action that you permit, assist or facilitate any person or entity to take related to these Access Terms, Your Materials or use of the Services; and

(f) End Users' use of Your Materials and the Services and ensuring that End Users comply with your obligations under these Access Terms and that the terms of your agreement with each End User are consistent with these Access Terms.

2.2 Other Security and Backup. You or your Provider are solely responsible for properly configuring and using the Services and taking your own steps to maintain appropriate security, protection and backup of Your Materials, including using encryption technology to protect Your Materials from unauthorized access and routinely archiving Your Materials.

2.3 End User Violations. If you become aware of any violation of your obligations under these

Access Terms by an End User, you will immediately terminate such End User's access to Your Materials and the Services.

3. Suspension. We may suspend the AWS account through which you access the Services immediately, with written notice to your contracting officer, if we determine:

(a) you are, or any End User is, in breach of the Acceptable Use Policy ("AUP") or Service Terms; or

(b) your or an End User's use of the Services (i) poses a security risk to the Services or any other AWS customer, "(ii) may harm AWS, our systems or the systems or Materials of any other AWS customer; or (iii) may as a result of (i) and/or (ii) subject us to third party liability.

(c) We and Provider will cooperate with your contracting officer or other authorized representative in an effort to remove or resolve the conditions that precipitated the suspension and will promptly reinstate your AWS account and restore your access to the Services from the Provider upon the removal or resolution of such conditions. Nothing in this Section 3 shall operate to limit your rights and remedies otherwise available to you under applicable law and regulations, including without limitation the right to require adequate assurances of future performance and to terminate these Access Terms for default as contemplated in FAR 52.212-4(m) and to initiate a claim as contemplated in FAR 52.212-4(d).

4. Proprietary Rights

4.1 Adequate Rights. You represent and warrant to us that: (a) you or your licensors own all right, title, and interest in and to Your Materials; and (b) none of Your Materials or End Users' use of Your Materials or the Services will violate the Acceptable Use Policy.

4.2 Services. As between you and us, we or our licensors own and reserve all right, title, and interest in and to the Services. You have the right to use the Services solely as a sublicensee of Provider in accordance with the agreement between you and Provider. We have no obligation to provide the Service to you under these Access Terms, so you must look exclusively to Provider and your agreement with Provider regarding such obligation. Except as provided in this Section 4.2, you obtain no rights under these Access Terms from us or our licensors to the Services, including any related intellectual property rights.

As a part of the Services, you may have access to AWS Materials and materials of third parties which may be subject to additional terms and conditions. If you are US Government End User, you are solely responsible for securing any necessary approvals for the download and use of such materials.

4.3 Restrictions. Neither you nor any End User may use the Services in any manner or for any purpose other than as expressly permitted by these Access Terms and the agreement between you and Provider. Neither you nor any End User may, or may attempt to, (a) modify, alter, tamper with, repair, or otherwise create derivative works of any software included in the Services (except to the extent software included in the Services are provided to you under a separate license that expressly permits the creation of derivative works), (b) reverse engineer, disassemble, or decompile the software included in the Services or apply any other process or procedure to derive the source code of any software included in the Services, or (c) access or use the Services in a way intended to avoid incurring fees or exceeding usage limits or quotas. All licenses granted to you with respect to the Services are conditional on your continued compliance with these Access Terms, and you will immediately discontinue your use of the Services if you cannot comply with any term or condition of these Access Terms.

4.4 Suggestions. If you provide any Suggestions to us when using the Services, you hereby grant to AWS and its affiliates a perpetual, irrevocable, non-exclusive, worldwide, royalty-free right and license

to reproduce, distribute, make derivative works based upon, publicly display, publicly perform, make, have made, use, sell, offer for sale, and import the Suggestions, including the right to sublicense such rights through multiple tiers, alone or in combination. You will ensure that you have all rights necessary to grant these rights to AWS and its affiliates..

5. Representation and Warranty. You represent and warrant that (a) you and your End Users' use of the Services (including any use by your employees and personnel) will not violate these Access Terms; (b) Your Materials (including the use, development, design, production, advertising, or marketing of Your Materials) or the combination of Your Materials with other applications, content or processes, do not and will not violate any applicable laws or infringe or misappropriate any third-party rights; and (c) your use of the Services will not cause harm to any End User.

6. Disclaimers. WE PROVIDE THE SERVICESON AN "AS IS" BASIS TO PROVIDER. WE AND OUR LICENSORS MAKE NO REPRESENTATIONS OR WARRANTIES OF ANY KIND TO YOU, WHETHER EXPRESS, IMPLIED, STATUTORY OR OTHERWISE REGARDING THE SERVICES OR THE THIRD PARTY MATERIALS, INCLUDING ANY WARRANTY THAT THE SERVICES OR THIRD PARTY MATERIALS WILL BE UNINTERRUPTED, ERROR FREE OR FREE OF HARMFUL COMPONENTS, OR THAT ANY MATERIALS, INCLUDING YOUR MATERIALS OR THE THIRD PARTY MATERIALS, WILL BE SECURE OR NOT OTHERWISE LOST OR DAMAGED. EXCEPT TO THE EXTENT PROHIBITED BY LAW, WE AND OUR LICENSORS DISCLAIM ALL WARRANTIES, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY, SATISFACTORY QUALITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT, OR QUIET ENJOYMENT, AND ANY WARRANTIES ARISING OUT OF ANY COURSE OF DEALING OR USAGE OF TRADE.

7. Limitations of Liability. YOU MUST LOOK SOLELY TO YOUR PROVIDER AND YOUR AGREEMENT WITH THEM REGARDING ANY CLAIMS OR DAMAGES RELATED TO THE SERVICES. WE AND OUR AFFILIATES OR LICENSORS WILL NOT BE LIABLE TO YOU FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL OR EXEMPLARY DAMAGES (INCLUDING DAMAGES FOR LOSS OF PROFITS, GOODWILL, USE, OR DATA), EVEN IF A PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. FURTHER, NEITHER WE NOR ANY OF OUR LICENSORS WILL BE RESPONSIBLE FOR ANY COMPENSATION, REIMBURSEMENT, OR DAMAGES ARISING IN CONNECTION WITH: (A) YOUR INABILITY TO USE THE SERVICES, INCLUDING AS A RESULT OF ANY (I) SUSPENSION OF YOUR USE OF OR ACCESS TO THE SERVICES, (II) OUR DISCONTINUATION OF ANY OR ALL OF THE SERVICES, OR, (III) ANY UNANTICIPATED OR UNSCHEDULED DOWNTIME OF ALL OR A PORTION OF THE SERVICES FOR ANY REASON; OR (B) ANY UNAUTHORIZED ACCESS TO, ALTERATION OF, OR THE DELETION, DESTRUCTION, DAMAGE, LOSS OR FAILURE TO STORE ANY OF YOUR MATERIALS OR OTHER DATA THAT YOU OR ANY END USER SUBMITS OR USES IN CONNECTION WITH THE SERVICES (INCLUDING AS A RESULT OF YOUR OR ANY END USERS' ERRORS, ACTS OR OMISSIONS).

8. Miscellaneous.

8.1 U.S. Government Rights. In accordance with Federal Acquisition Regulation (FAR) Sections 12.211 and 12.212, and Defense Federal Acquisition Regulation Supplement (DFARS) Sections 227.7202-1 and 227.7202-3, the Services are provided to the U.S. Government as "commercial items," "commercial computer software," "commercial computer software documentation," and "technical data" with the same rights and restrictions generally applicable to the Services. The terms "commercial item," "commercial computer software," "commercial computer software documentation," and "technical data" are defined in the FAR and the DFARS.

8.2 Import and Export Compliance. In connection with these Access Terms, you will comply with all applicable import, re-import, export, and re-export control laws and regulations.

8.3 Governing Law; Venue. To the extent not preempted by federal law, the laws of the State of Washington, without reference to conflict of law rules, govern these Access Terms and any dispute of any sort that might arise between you and us related to the Access Terms or the Services. The United Nations Convention for the International Sale of Goods does not apply to these Access Terms.

8.4 Conflicts. These Access Terms supersede all prior or contemporaneous representations,

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understandings, agreements, or communications between you and us, whether written or verbal, regarding the subject matter of these Access Terms. If the terms of these Access Terms are inconsistent with the terms contained in your agreement with Provider, the terms contained in this document will control as between you and AWS.

8.5 Survival. The following provisions will survive any termination of your use of the Services: Sections 2.1, 4, 5, 6, 7, 8, and 9.

9. Definitions.

"Acceptable Use Policy" means the policy currently available at http://aws.amazon.com/aup, as it may updated by us from time to time.

"API" means an application program interface.

"AWS Materials" means Materials we make available in connection with the Services or on the AWS Site to allow access to and use of the Services, including WSDLs; Documentation; sample code; software libraries; command line tools; and other related technology. AWS Materials does not include the Services.

"AWS Service Level Agreement" means all service level agreements that we offer with respect to the Services and post on the AWS Site, as they may be updated by us from time to time.

"AWS Site" means http://aws.amazon.com and any successor or related site designated by us.

"Documentation" means the developer guides, getting started guides, user guides, quick reference guides, and other technical and operations manuals and specifications for the Services currently located at http://aws.amazon.com/documentation, as such documentation may be updated by us from time to time.

"End User" means any individual or entity that directly or indirectly through another user: (a) accesses or uses Your Materials; or (b) otherwise accesses or uses the Services through you.

"Materials" means software (including machine images), data, text, audio, video, images or other content.

"Policies" means the Acceptable Use Policy, the Terms of Use, the Service Terms, all restrictions described in the AWS Materials and on the AWS Site, and any other policy or terms referenced in or incorporated into these Access Terms.

"Service" means each of the web services made available by us, including those web services described in the Service Terms.

"Service Terms"< means the rights and restrictions for particular Services located at http://aws.amazon.com/serviceterms, as they may be updated by us from time to time.

"Suggestions" means all suggested improvements to the Services or AWS Materials that you provide to us.

"Terms of Use" means the terms of use located at http://aws.amazon.com/terms/, as they may be updated by us from time to time.

"Third Party Materials" means Materials made available to you by any third party on the AWS Site or in conjunction with the Services.

"Your Materials" means Materials you or any End User (a) run on the Services, (b) cause to interface with the Services, or (c) upload to the Services or otherwise transfer, process, use or store in connection with the Services.

Microsoft License Terms and Conditions – For GSA

MICROSOFT CORPORATION ("MICROSOFT") IS A FIRST TIER SUBCONTRACTOR UNDER THIS CONTRACT. THESE MICROSOFT LICENSE TERMS AND CONDITIONS APPLY TO MICROSOFT PRODUCTS THAT YOU ORDER FROM THE CONTRACTOR UNDER THE CONTRACTOR'S GSA SCHEDULE CONTRACT (THE "CONTRACT"). THESE MICROSOFT LICENSE TERMS AND CONDITIONS SHALL TAKE PRECEDENCE OVER ANY CONFLICTING TERMS IN AN ORDER OR ORDERING DOCUMENTATION.

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In this agreement, the following definitions apply:

"Additional Product" means any Product identified as such in the Product List and chosen for Enrolled Affiliate under the applicable Enrollment and identified on your Order.

"Affiliate" means any legal entity that a party owns, that owns a party, or that is under common ownership with a party. "Ownership" means, for purposes of this definition, control of more than a 50% interest in an entity.

"Community" means the community consisting of one or more of the following: (1) a Government, (2) an Enrolled Affiliate using eligible Government Community Cloud Services to provide solutions to a Government or a qualified member of the Community, or (3) an Enrolled Affiliate with Customer Data that is subject to Government regulations for which the Enrolled Affiliate determines and Microsoft agrees that the use of Government Community Cloud Services is appropriate to meet the Enrolled Affiliate's regulatory requirements. Membership in the Community is ultimately at Microsoft's discretion, which may vary by Government Community Cloud Service.

"Customer Data" means all data, including all text, sound, software, or image files that are provided to Microsoft by, or on behalf of, Enrolled Affiliate through its use of the Online Services.

Any reference in this agreement or an Enrollment to a "day" means a calendar day, except references that specify "business day".

"Enrollment" means the document that Government Partner submits to Microsoft to place orders for Enrolled Affiliate.

"Enrolled Affiliate" or "you" means any entity of the United States or entity authorized by the United States that enters into a Government Contract for Products with Government Partner.

"Enterprise" means Enrolled Affiliate and the Affiliates listed on an Enrollment.

"Enterprise Product" means any Desktop Platform Product that Microsoft designates as an Enterprise Product in the Product Terms for which Government Partner chooses to order License(s) under an Enrollment for Enrolled Affiliate. Enterprise Products must be licensed for all Qualified Devices and Qualified Users on an Enterprise-wide basis under this program.

"Federal Agency" means a bureau, office, agency, department or other entity of the United States Government.

"Fixes" means Product fixes, modifications or enhancements or their derivatives that Microsoft releases generally (such as Product service packs), or provides to Enrolled Affiliate to address a specific issue.

"Government" means a Federal Agency, State/Local Entity, or Tribal Entity acting in its governmental capacity.

"Government Community Cloud Services" means Microsoft Online Services that are provisioned in Microsoft's multi-tenant data centers for exclusive use by or for the Community and offered in accordance with the National Institute of Standards and Technology (NIST) Special Publication 800-145. Microsoft Online Services that are Government Community Cloud Services are designated as such in the Use Rights and Product Terms.

"Government Contract" means the Government Partner's GSA Schedule Contract, which incorporates these Microsoft License Terms and Conditions.

"Government Partner" means the entity from whom you place your order for Products under the Government Contract.

"Industry Device" (also known as line of business device) means any device that: (1) is not useable in its deployed configuration as a general purpose personal computing device (such as a personal computer), a multi-function server, or a commercially viable substitute for one of these systems; and (2) only employs an industry or task-specific software program (e.g. a computer-aided design program used by an architect or a point of sale program) ("Industry Program"). The device may include features and functions derived from Microsoft software or third-party software. If the device performs desktop functions (such as email, word processing, spreadsheets, database, network or Internet browsing, or scheduling, or personal finance), then the desktop functions: (1) may only be used for the purpose of supporting the Industry Program functionality; and (2) must be technically integrated with the Industry Program or employ technically enforced policies or architecture to operate only when used with the Industry Program functionality.

"License" means Enrolled Affiliate's right to use the quantity of a Product ordered. For certain Products, a License may be available on a subscription basis ("Subscription License"). Licenses for Online Services will be considered Subscription Licenses under these Additional Use Right and Restrictions.

"Managed Device" means any device on which any Affiliate in the Enterprise directly or indirectly controls one or more operating system environments. Examples of Managed Devices can be found in the Product Terms.

"Online Services" means the Microsoft-hosted services identified in the Online Services section of the Product Terms.

"Online Services Terms" means the additional terms that apply to Customer's use of Online Services published on the Volume Licensing Site and updated from time to time.

"Order" means the order placed by you to the Government Partner under the Government Partner's GSA Schedule contract.

"Product" means all products identified on the Product Terms, such as software, Online Services and other web-based services, including pre-release or beta versions. Product availability may vary by region.

"Product Terms" means the document that provides information about Microsoft Products available through volume licensing. The Product Terms document is published on the Volume Licensing Site at http://explore.ms./com and is updated from time to time.

 "Qualified Device" means any device that is used by or for the benefit of Enrolled Affiliate's Enterprise and is: (1) a personal desktop computer, portable computer, workstation, or similar device capable of running Windows Pro locally (in a physical or virtual operating system environment), or (2) a device used to access a virtual desktop infrastructure ("VDI"). Qualified Devices do not include any device that is: (1) designated as a server and not used as a personal computer, (2) an Industry Device, or (3) not a Managed Device.

At its option, the Enrolled Affiliate may designate any device excluded above (e.g., Industry Device) that is used by or for the benefit of the Enrolled Affiliate's Enterprise as a Qualified Device for all or a subset of Enterprise Products or Online Services the Enrolled Affiliate has selected.

"Qualified User" means a person (e.g., employee, consultant, contingent staff) who: (1) is a user of a Qualified Device, or (2) accesses any server software requiring an Enterprise Product Client Access License or any Enterprise Online Service. It does not include a person who accesses server software or an Online Service solely under a License identified in the Qualified User exemptions in the Product Terms.

"Reserved License" means for an Online Service identified as eligible for true-ups in the Product Terms, the License reserved by Enrolled Affiliate prior to use and for which Microsoft will make the Online Service available for activation.

"SLA" means Service Level Agreement, which specifies the minimum service level for Online Services and is published on the Volume Licensing Site.

"Software" means licensed copies of Microsoft software identified on the Product Terms. Software does not include Online Services, but Software may be part of an Online Service.

"Software Assurance" means an offering that provides new version rights and other benefits for Products as described in the Product Terms.

"Trade Secret" means information that is not generally known or readily ascertainable to the public, has economic value as a result, and has been subject to reasonable steps under the circumstances to maintain its secrecy.

"Tribal Entity" means a federally-recognized tribal entity performing tribal governmental functions and eligible for funding and services from the U.S. Department of Interior by virtue of its status as an Indian tribe.

"Use Rights," means the use rights or terms of service for each Product published on the Volume Licensing Site and updated from time to time. The Use Rights supersede the terms of any end user license agreement that accompanies a Product. The Use Rights for Software are published by Microsoft in the Product Terms. The Use Rights for Online Services are published in the Online Services Terms.

"use" or "run" means to copy, install, use, access, display, run or otherwise interact.

1.   *Licenses for Products.*

Upon Microsoft's acceptance of Government Partner's Enrollment for an Enrolled Affiliate, the Enrolled Affiliate has the following rights during the term of its Order. These rights apply to the Licenses obtained under the Order.

   a. **License Grant.** By accepting an Enrollment, Microsoft grants the Enterprise a non-exclusive, worldwide and limited right to download, install and use software Products, and to access and use the Online Services, each in the quantity ordered under the Enrollment. The rights granted are subject to the terms of the Use Rights and the Product Terms and are conditions on Enrolled Affiliate's continued compliance with the terms of this agreement, including, without limitation, payment for the Licenses. Microsoft reserves all rights not expressly granted in this agreement.

   b. **Duration of Licenses.** Subscription Licenses and most Software Assurance rights are temporary and expire when the applicable Enrollment is terminated or expires, unless the Enrollment is renewed or Enrolled Affiliate exercises a buy-out option, which is available for some Subscription Licenses. Except as otherwise noted in the applicable Enrollment or Use Rights, all other Licenses become perpetual only when all payments for that License have been made and the initial Enrollment term has expired.

   c. **Applicable Use Rights.**

      (i) Products (other than Online Services). The Use Rights in effect on the effective date of the Enrollment will apply to Enterprise's use of the version of each Product that is current at the time. For future versions and new Products, the Product Use Rights in effect when those versions and Products are first released will apply. Changes Microsoft makes to the Use Rights for a particular version will not apply unless the Enrolled Affiliate chooses to have those changes apply.   The Use Rights applicable to perpetual Licenses that were acquired under a previous agreement or Enrollment are determined by the agreement or

Enrollment under which they were acquired. Renewal of Software Assurance does not change which Use Rights apply to those Licenses.

(ii) Online Services. For Online Services, the Use Rights in effect on the subscription start date will apply for the subscription term as defined in the Product Terms.

(iii) More restrictive use rights. If a new version of a Product has more restrictive use rights than the version that is current at the start of the applicable initial or renewal term of the Enrollment, those more restrictive use rights will not apply to the Enterprise's use of that Product during the term.

d. **Downgrade rights.** Enterprise may use an earlier version of Product than the version that is current on the effective date of the Enrollment. In that case, the Use Rights for the current version apply to the use of the earlier version. If the earlier Product version includes features that are not in the new version, then the Use Rights applicable to the earlier version apply with respect to those features.

e. **New Version Rights under Software Assurance.** Enrolled Affiliate must order and maintain continuous Software Assurance coverage for each License ordered. With Software Assurance coverage, Enterprise automatically has the right to use a new version of a licensed Product as soon as it is released, even if Enterprise chooses not use the new version immediately.

   (i) Except as otherwise permitted under an Enrollment, use of the new version will be subject to the new version's Use Rights.

   (ii) If the License for the earlier version of the Product is perpetual at the time the new version is released, the License for the new version will also be perpetual. Perpetual Licenses obtained through Software Assurance replace any perpetual Licenses for the earlier version.

f. **License confirmation.** The Government Contract, the Order, the Enrolled Affiliate's order confirmation, and any documentation evidencing transfers of Licenses, together with proof of payment, will be the Enrolled Affiliate's evidence of all Licenses ordered by the Government Partner under an Enrollment for an Enrolled Affiliate.

g. **Reorganizations, Consolidations, and Privatizations.** If the number of Licenses covered by an Enrollment changes by more than ten percent as a result of a reorganization, consolidation, or privatization of any member of the Enterprise, Microsoft will work with Government Partner in good faith to determine how to accommodate the Enterprise's changed circumstances in the context of these Additional Use Rights and Restrictions.

h. **Modification or termination of an Online Service for regulatory reasons.** Microsoft may modify or terminate an Online Service in any country or jurisdiction where there is any current or future government requirement or obligation that: (1) subjects Microsoft to any regulation or requirement not generally applicable to businesses operating there; (2) presents a hardship for Microsoft to continue operating the Online Service without modification; and/or (3) causes Microsoft to believe these terms or the Online Service may be in conflict with any such requirement or obligation.

i. **Program updates.** Microsoft may make a change to the Enterprise and/or Enterprise Subscription programs that will make it necessary for Enrolled Affiliates to enter into a new agreement and Enrollments with Government Partner at the time ofan Enrollment renewal. If any such updates occur during a current contract, including option periods, such change(s) will be made at no increase in cost to Enrolled Affiliate: all pricing in the current contract, including contract options will be honored despite any such change(s).

2. *Making copies of Products and re-imaging rights.*

a. General. Enrolled Affiliate may make as many copies of the Products as it needs to distribute them within the Enterprise. Copies must be true and complete (including copyright and trademark notices), from master copies obtained from a Microsoft approved fulfillment source. Enrolled Affiliate may use a third party to make these copies, but Enrolled Affiliate agrees that it will be responsible for any third party's actions. Enrolled Affiliate agrees to make reasonable efforts to notify its employees, agents, and any other individuals who use the Products that the Products are licensed from Microsoft and subject to the terms of the Government Contract and the Order.

b. Copies for training/evaluation and back-up. For all Products other than Online Services, Enrolled Affiliate may (1) use up to 20 complimentary copies of any Product in a dedicated training facility on its premises for purposes of training on that particular Product, (2) use up to 10 complimentary copies of any Product for a 60-day evaluation period, and (3) use one complimentary copy of any licensed Product for back-up or archival purposes for each of its distinct geographic locations. Trials for Online Services may be available if specified in the Use Rights.

c. Right to re-image. In certain cases, re-imaging is permitted using the Product media. If the Microsoft Product(s) is licensed (1) from an original equipment manufacturer (OEM), (2) as full packaged Product through a retail source, or (3) under another Microsoft program, then media provided under the Order may be generally used to create images for use in place of copies provided through that separate source. This right is conditional upon the following:

(i) Separate Licenses must be acquired from the separate source for each Product that is re-imaged.

(ii) The Product, language, version and components of the copies made must be identical to the Product, language, version, and all components of the copies they replace and the number of copies or instances of the re-imaged Product permitted remains the same.

(iii) Except for copies of an operating system and copies of Products licensed under another Microsoft program, the Product type (e.g., Upgrade or full License) re-imaged must be identical to the Product type from the separate source.

(iv) Enrolled Affiliate must adhere to any Product specific processes or requirements for re-imaging identified in the Product Terms.

Re-imaged Products remain subject to the terms and use rights of the License acquired from the separate source. This subsection does not create or extend any warranty or support obligation.

3. *Transferring and assigning licenses.*

a. License transfers. License transfers are not permitted, except that Enrolled Affiliate may transfer only fully-paid perpetual Licenses to:

(i) an Affiliate, or

(ii) a third party solely in connection with the transfer of hardware or employees to whom the Licenses have been assigned as part of (1) a reorganization or privatization of an Affiliate or a division of an Affiliate or (2) a consolidation involving Enrolled Affiliate or an Affiliate.

Upon such transfer, Enrolled Affiliate must uninstall and discontinue using the licensed Product and render any copies unusable.

b. Notification of License Transfer. Enrolled Affiliate must notify Microsoft of a transfer of License by completing a license transfer form, which can be obtained from

and sending the completed form to Microsoft before the license transfer. No License transfer will be valid unless Enrolled Affiliate provides to the transferee, and the transferee accepts in writing, documents sufficient to enable the transferee to ascertain the scope, purpose and limitations of the rights granted by Microsoft under the licenses being transferred (including, without limitation, the applicable Use Rights, use and transfer restrictions, warranties and limitations of liability. Any license transfer not made in compliance with this section will be void.

c. **Internal assignment of Licenses and Software Assurance.** Licenses and Software Assurance must be assigned to a single user or device within the Enterprise. Licenses and Software Assurance may be reassigned as described in the Use Rights.

4. *Use, ownership, rights, and restrictions.*

a. **Products.** Use of any Product is governed by the Use Rights specific to each Product and version and by these Additional Use Rights and Restrictions.

   (i) Fixes. Each fix is under the same license terms as the Product to which it applies. If a Fix is not provided for a specific Product, any use terms Microsoft provides with the Fixe will apply.

b. **Non-Microsoft software and technology.**

   Enrolled Affiliate is solely responsible for any non-Microsoft software or technology that it installs or uses with the Products or Fixes.

   (i)   Microsoft is not a party to and is not bound by any terms governing Enrolled Affiliate's use of non-Microsoft software or technology. Without limiting the foregoing, non-Microsoft software or scripts linked to or referenced from any Product website, are governed by the open source licenses used by the third parties that own such code, not by Microsoft and Microsoft's licensing terms.

   (ii) If Enrolled Affiliate installs or uses any non-Microsoft software or technology with the Products or Fixes, it directs and controls the installation in and use of such software or technology in the Products or Fixes, through its actions (e.g., through Enrolled Affiliate's use of application programming interfaces and other technical means that are part of the Online Services). Microsoft will not run or make any copies of such non-Microsoft software or technology outside of its relationship with Enrolled Affiliate.

   (iii) Restrictions Enrolled Affiliate must not (and must not attempt to): (1) reverse engineer, decompile or disassemble any Product, Fix, or Services Deliverable, (2) install or use non-Microsoft software or technology in any way that would subject Microsoft's intellectual property or technology to obligations beyond those included in this agreement; or (3) work around any technical limitations in the Products or restrictions in Product documentation. Except as expressly permitted in this agreement, Enrolled Affiliate must not (i) separate and run parts of a Product on more than one device, upgrade or downgrade parts of a Product at different times, or transfer parts of a Product separately; or (ii) distribute, sublicense, rent, lease, lend, or use any Product, or Fix to offer hosting services to a third party.

No transfer of ownership; **Reservation of rights.** Products and Fixes are protected by copyright and other intellectual property rights laws and international treaties. Microsoft (1) does not transfer any ownership rights in any Products or Fixes and (2) reserves all rights not expressly granted to Enrolled Affiliate.

5.   *Confidentiality.*

 "Confidential Information" is non-public information that is designated "confidential" or that a reasonable person should understand is confidential, including Customer Data. Confidential Information does not include information that (1) becomes publicly available without a breach of this agreement, (2) the receiving party received lawfully from another source without a confidentiality obligation, (3) is independently developed, or (4) is a comment or suggestion volunteered about the other party's business, products or services.

Each party will take reasonable steps to protect the other's Confidential Information and will use the other party's Confidential Information only for purposes of the parties' business relationship. Neither party will disclose that Confidential Information to third parties, except to its employees, Affiliates, contractors, advisors and consultants ("Representatives") and then only on a need-to-know basis under nondisclosure obligations at least as protective as this agreement. Each party remains responsible for the use of the Confidential Information by its Representatives and, in the event of discovery of any unauthorized use or disclosure, must promptly notify the other party.

A party may disclose the other's Confidential Information if required by law; but only after it notifies the other party (if legally permissible) to enable the other party to seek a protective order.

Neither party is required to restrict work assignments of its Representatives who have had access to Confidential Information. Each party agrees that the use of information retained in Representatives' unaided memories in the development or deployment of the parties' respective products or services does not create liability under this agreement or trade secret law, and each party agrees to limit what it discloses to the other accordingly.

These obligations apply (i) for Customer Data until it is deleted from the Online Services, and (ii) for all other Confidential Information, for a period of five years after the Confidential Information is received.

Freedom of Information Act (FOIA). Notwithstanding anything in this section to the contrary, the parties acknowledge and agree that Enrolled Affiliate is subject to the United States Freedom of Information Act (5 U.S.C. § 552) and may disclose information in response to a valid request in accordance with FOIA. Should Enrolled Affiliate receive a request under FOIA for Microsoft's confidential information, Enrolled Affiliate agrees to give Microsoft adequate prior notice of the request and before releasing Microsoft's confidential information to a third party, in order to allow Microsoft sufficient time to seek injunctive relief or other relief against such disclosure.

6.   *Privacy and Compliance with Laws.*

   a. Enrolled Affiliate consents to the processing of personal information by Microsoft and its agents to facilitate the subject matter of these Microsoft License Terms and Conditions and the applicable Order. Enrolled Affiliate will obtain all required consents from third parties (including Enrolled Affiliate's contacts, resellers, distributors, administrators, and employees) under applicable privacy and data protection law before providing personal information to Microsoft.

   b. Unless otherwise specified in the Enrollment or the Use Rights, personal information collected under these Microsoft License Terms and Conditions (i) may be transferred, stored and processed in the United States or any other country in which Microsoft or its contractors maintain facilities and (ii) will be subject to the privacy terms specified in the Use Rights. Microsoft abides by the EU Safe Harbor and the Swiss Safe Harbor frameworks as set forth by the U.S. Department of Commerce regarding the collection, use, and retention of data from the European Union, the European Economic Area, and Switzerland.

   c. **U.S. export.** Products and Fixes are subject to U.S. export jurisdiction. Enrolled Affiliate must comply with all applicable international and national laws, including the U.S. Export Administration Regulations, the International Traffic in Arms Regulations, and end-user,

end use and destination restrictions by U.S. and other governments related to Microsoft products, services, and technologies.

7. *Warranties.*

a. Limited warranties and remedies.

(i) **Software.** Microsoft warrants that each version of the Software will perform substantially as described in the applicable Product documentation for one year from the date Enrolled Affiliate is first licensed for that version. If it does not and Enrolled Affiliate notifies Microsoft within the warranty term, then Microsoft will, at its option (1) return the price Customer paid for the Software license, or (2) repair or replace the Software.

(ii) **Online Services.** Microsoft warrants that each Online Services will perform in accordance with the applicable SLA during the Enrolled Affiliate's use. Enrolled Affiliate's remedies for breach of this warranty are in the SLA.

The remedies above are Enrolled Affiliate's sole remedies for breach of the warranties in this section. Enrolled Affiliate waives any breach of warranty claims not made during the warranty period.

b. Exclusions. The warranties in this agreement do not cover problems caused by accident, abuse or use in a manner inconsistent with this agreement, including failure to meet minimum system requirements. These warranties do not apply to free, trial, pre-release, or beta Products, or to components of Products that Enrolled Affiliate is permitted to redistribute.

c. DISCLAIMER. Microsoft provides no other warranties or conditions and disclaims any other express, implied or statutory warranties, including warranties of quality, title, non-infringement, merchantability, and fitness for a particular purpose.

8. *Defense of third party claims.*

a. By Microsoft. Microsoft will defend Enrolled Affiliate against any claims made by an unaffiliated third party that (i) any Product or Fix made available by Microsoft infringes its patent, copyright or trademark or makes unlawful use of its Trade Secret, or (ii) that arises from Microsoft's provision of an Online Service in violation of laws applicable to all online services providers. Microsoft will pay the amount of any resulting adverse final judgment or approved settlement. This does not apply to claims or awards based on (i) Customer Data; (ii) non-Microsoft software; (iii) modifications to a Product or a Fix Enrolled Affiliate makes or any specifications or materials Enrolled Affiliate provides; (iv) Enrolled Affiliate's combination of a Product or Fix with (or damages based on the value of) a non-Microsoft product, data, or business process; (v) Enrolled Affiliate's use of a Microsoft trademark without express, written consent or the use or redistribution of a Product or Fix in violation of this agreement; (vi) Enrolled Affiliate's continued use of a Product or Fix after being notified to stop due to a third party claim; or (vii) Products or Fixes provided free of charge.

b. Your agreement to protect. Enrolled Affiliate agrees that use of Customer Data or non-Microsoft software Microsoft hosts on Enrolled Affiliate's behalf will not infringe any third party's patent, copyright or trademark or make unlawful use of any third party's Trade Secret. In addition, Enrolled Affiliate will not use an Online Service to gain unauthorized access to or disrupt any service, data, account or network in connection with the use of the Online Services.

c. **Rights and remedies in case of possible infringement or misappropriation.** If Microsoft reasonably believes that a claim under this section may result in a legal bar prohibiting Enrolled Affiliate's use of the Product or Fix, Microsoft will seek to obtain the right for Enrolled Affiliate to keep using it or modify or replace it with a functional equivalent, in which case Enrolled Affiliate must discontinue use of the prior version immediately. If these options are not commercially reasonable, Microsoft may terminate Enrolled Affiliate's right to the Product or Fix and refund any amounts Enrolled Affiliate has paid for those rights to Software and Fixes and, for Online Services, any amount paid for a usage period after the termination date.

d. **Other terms.** Enrolled Affiliate must notify Microsoft promptly in writing of a claim subject to this section; give Microsoft sole control over the defense and settlement; and provide reasonable assistance in defending the claims. Microsoft will reimburse Enrolled Affiliate for reasonable out of pocket expenses that it incurs in providing assistance. The remedies provided in this section are the exclusive remedies for the claims described in this section.

Notwithstanding the foregoing, Microsoft's rights set forth in this section (and the rights of the third party claiming infringement) shall be governed by the provisions of 28 U.S.C. § 1498.

9. *Limitation of liability.*

To the extent permitted by applicable law, for each Product, each party's maximum, aggregate liability to the other under this Agreement is limited to direct damages finally awarded in an amount not to exceed the amounts Enrolled Affiliate was required to pay for the applicable Products during the term of the Agreement, subject to the following:

a. **Online Services**. For Online Services, Microsoft's maximum liability to Enrolled Affiliate for any incident giving rise to a claim will not exceed the amount Enrolled Affiliate paid for the Online Service during the 12 months before the incident.

b. **Free Products and Distributable Code.** For Products provided free of charge and code that Enrolled Affiliate is authorized to redistribute to third parties without separate payment to Microsoft, Microsoft's liability is limited to direct damages finally awarded up to US$5,000.

c. **Exclusions.** In no event will either party be liable for indirect, incidental, special, punitive, or consequential damages, including loss of use, loss of profits, or interruption of business, however caused or on any theory of liability.

d. **Exceptions.** No limitation or exclusions will apply to liability arising out of either party's (1) confidentiality obligations (except for all liability related to Customer Data, which will remain subject to the limitations and exclusions above); (2) defense obligations; or (3) violation of the other party's intellectual property rights.

e. This clause shall not impair the U.S. Government's right to recover for fraud or crimes arising out of or related to these Microsoft License Terms and Conditions under any federal fraud statute, including the False Claims Act, 31 U.S.C. §§ 3729-3733.

10. *True-up Requirements*

a. **True-Up Order**. Enrolled Affiliate must submit an annual true-up order that accounts for changes since the initial order or last true-up order. If there are no changes, then an update statement must be submitted instead of a true-up order. Microsoft, at its discretion, may validate the true-up data submitted through a formal product deployment assessment using an approved Microsoft partner.

b. **Enterprise Products.** Enrolled Affiliate must determine the number of Qualified Devices and Qualified Users (if ordering user-based Licenses) at the time the true-up order is placed and must order additional Licenses for all Qualified Devices and Qualified Users

that are not already covered by existing Licenses, including any Enterprise Online Services.

c. **Additional Products.** For Additional Products that have been previously ordered, Enrolled Affiliate must determine the maximum number of Additional Products used since the latter of the initial order , the last true-up order, or the prior anniversary date and submit a true-up order that accounts for any increase.

d. **Online Services.** For Online Services identified as eligible for true-up in the Product Terms, Enrolled Affiliate may reserve the additional Licenses prior to use, and payment may be deferred until the next true-up order. Microsoft will provide a report of Reserved Licenses in excess of existing orders to Enrolled Affiliate's Government Partner. Reserved Licenses will be invoiced retroactively to the month in which they were reserved.

e. **Subscription License reductions**. Enrolled Affiliate may reduce the quantity of Subscription Licenses at the enrollment anniversary date on a prospective basis if permitted in the Product Terms as follows:

  i. For Subscription Licenses part of an Enterprise-wide purchase, Licenses may be reduced if the total quantity of Licenses and Software Assurance for an applicable group meets or exceeds the quantity of Qualified Devices identified on the Product Selection Form and includes any additional Qualified Devices and Qualified Users added in any prior true-up orders. Step-up Licenses and add-on subscription licenses do not count towards this total count.

  ii. For Enterprise Online Services not a part of an Enterprise-wide purchase, Licenses can be reduced as long as the initial order minimum requirements are maintained.

  iii. For Additional Products available as Subscription Licenses, Enrolled Affiliate may reduce the Licenses. If the License count is reduced to zero, then Enrolled Affiliate's use of the applicable Subscription License will be cancelled.

Invoices will be adjusted to reflect any reductions in Subscription Licenses at the true-up order Enrollment anniversary date and effective as of such date.

f. **Update statement.** An update statement must be submitted instead of a true-up order if, since the initial order or last true-up order, Enrolled Affiliate's Enterprise has not: (1) changed the number of Qualified Devices and Qualified Users licensed with Enterprise Products or Enterprise Online Services; and (2) increased its usage of Additional Products. This update statement must be signed by Enrolled Affiliate's authorized representative. The update statement must be received by Microsoft between 60 and 30 days prior to the Enrollment anniversary date. The last update statement is due within 30 days prior to the Expiration Date.

g. **True-up order period.** The true-up order or update statement must be received by Microsoft between 60 and 30 days prior to each Enrollment anniversary date. The third-year true-up order or update statement is due within 30 days prior to the Expiration Date, and any license reservations within this 30 day period will not be accepted. Enrolled Affiliate may submit true-up orders more often to account for increases in Product usage, but an

annual true-up order or update statement must still be submitted during the annual order period.

h. **Late true-up**. If the true-up order or update statement is not received when due:

(i) Enrolled Affiliate will be invoiced for all Reserved Licenses not previously ordered; and.

(ii) *Subscription License reductions cannot be reported until the following Enrollment anniversary date (or at Enrollment renewal, as applicable).*

i. **Step-up Licenses**. For Licenses eligible for a step-up under this Enrollment, Enrolled Affiliate may step-up to a higher edition or suite as follows:

For step-up Licenses included on an initial order, Enrolled Affiliate may order according to the true-up process.

If step-up Licenses are not included on an initial order, Enrolled Affiliate may step-up initially by following the process described in the Section titled "Adding new Products not previously ordered," then for additional step-up Licenses, by following the true-up order process.

11. Verifying compliance.

a. **Right to verify compliance.** Enrolled Affiliate must keep records relating to all use and distribution of Products by Enrolled Affiliate and its Affiliates. Microsoft has the right, at its expense, to verify Enrolled Affiliate's and its Affiliates compliance with the Product's license terms.

b. **Verification process and limitations.** Microsoft will provide Enrolled Affiliate at least 30 days' notice of its intent to verify compliance. Verification will take place during normal business hours and in a manner that does not interfere unreasonably with Enrolled Affiliates operations. Microsoft will engage an independent auditor, which will be subject to a confidentiality obligation and subject to Enrolled Affiliate's security requirements. Enrolled Affiliate must promptly provide the independent auditor with any information it reasonably requests in furtherance of the verification, including access to systems running the Products and evidence of licenses for Products Enrolled Affiliate hosts, sublicenses, or distributes to third parties. Enrolled Affiliate agrees to complete Microsoft's self-audit process; which Microsoft may require as an alternative to a third party audit. Any information collected in the self-audit will be used solely for purposes of determining compliance.

c. **Remedies for non-compliance.** If verification or self-audit reveals any unlicensed use or distribution, then, within 30 days, Contractor will invoice Enrolled Affiliate for sufficient Licenses to cover that use or distribution. If unlicensed use or distribution is 5% or more, Enrolled Affiliate may be completely responsible for the costs Microsoft has incurred in verification, to the extent permitted by 31 U.S.C. § 1341 (Anti-Deficiency Act) and other applicable Federal law or similar state law (as applicable). The unlicensed use percentage is based on the total number of Licenses purchased compared to actual install base. Notwithstanding the foregoing, nothing in this section prevents the Enrolled Affiliate from disputing any invoice in accordance with the Contract Disputes Act (41 U.S.C. §§7101-7109). If there is no unlicensed use, Microsoft will not subject Enrolled Affiliate to another verification for at least one year. By exercising the rights and procedures described above, Microsoft does not waive its rights to enforce this agreement or to protect its intellectual property by any other means permitted by law.

12. Government Community Cloud.

a. **Community requirements.** Agency certifies that all Enrolled Affiliates in the Enterprise are members of the Community and represents that all Enrolled Affiliates in the Enterprise have agreed to use Government Community Cloud Services solely in their capacities as members of the Community and for the benefit of end users that are members of the Community. Use of Government Community Cloud Services by an entity that is not a member of the Community or to provide services to non-Community members is strictly prohibited and could result in termination of Government Partner's or an Enrolled Affiliate's license(s) for Government Community Cloud Services. Agency acknowledges that only Community members may use Government Community Cloud Services.

(i) All terms and conditions applicable to non-Government Community Cloud Services also apply to their corresponding Government Community Cloud Services, except as otherwise noted in the Use Rights and this Amendment.

(ii) Enrolled Affiliate may not deploy or use Government Community Cloud Services and corresponding non-Government Community Cloud Services in the same domain.

(iii) Any Enrolled Affiliate in the Enterprise that uses Government Community Cloud Services must maintain its status as a member of the Community. Maintaining status as a member of the Community is a material requirement for such services.

b. **Use Rights for Government Community Cloud Services.** For Government Community Cloud Services, notwithstanding anything to the contrary in the Use Rights:

(i) Government Community Cloud Services will be offered only within the United States.

(ii) Additional European Terms, as set forth in the Use Rights, will not apply.

(iii) References to geographic areas in the Use Rights with respect to the location of Customer Data at rest, as set forth in the Use Rights, refer only to the United States.

13.   Miscellaneous.

a. **Severability.** If any provision in this agreement is found unenforceable, the balance of the agreement will remain in full force and effect.

b. **Management and Reporting.** Enrolled Affiliate must provide and manage account details (e.g., contacts, orders, Licenses, software downloads) on Microsoft's Volume Licensing Service Center web site (or successor site) at: https://www.microsoft.com/licensing/servicecenter. On the effective date of this agreement and any Enrollments, the contact(s) Enrolled Affiliate has identified for this purpose will be provided access to this site and may assign additional users and contacts.

c. **Waiver.** Failure to enforce any provision of this agreement will not constitute a waiver. Any waiver must be in writing and signed by the waiving party.

d. **Free Products.** Any free Product provided to Enrolled Affiliate is for the sole use and benefit of the Enrolled Affiliate purposes only, and is not provided for use by or personal benefit of any specific government employee.

e. **Assignment.** Enrolled Affiliate may assign all its rights under this agreement to an Affiliate, but it must notify Microsoft in writing of the assignment. Any other proposed assignment under this agreement must be approved by the other party in writing. Any assignment will not relieve the assigning party of its obligations under the assigned agreement.   Any attempted assignment without required approval will be void.

f. **Use of contractors.** Microsoft may use contractors to support services but will be responsible for their performance subject to the terms of this agreement.

g. **Third party beneficiary.** Microsoft is a third party beneficiary of this agreement and may enforce its terms.

h. **Survival.** All provisions survive termination or expiration of this agreement except those requiring performance only during the term of the agreement.

i. **Privacy and Compliance with applicable Laws, privacy and security.**

   (i) Microsoft and Enrolled Affiliate will each comply with all applicable laws and regulations (including applicable security breach notification law). However, Microsoft is not responsible for compliance with any laws applicable to Enrolled Affiliate or Enrolled Affiliate's industry that are not also generally applicable to information technology services providers.

j. **Natural disaster.** In the event of a natural disaster, Microsoft may provide additional assistance or rights to Enrolled Affiliate than are set forth in this agreement by posting them on http://www.microsoft.com at such time.

k. **Disputes.** Any breach of these Microsoft License Terms and Conditions, including Enrolled Affiliate's obligations set forth herein, shall be handled in accordance with the Contracts Disputes Act (41 U.S.C. §§7101-7109).

l. **Voluntary Product Accessibility Templates.** Microsoft supports the government's obligation to provide accessible technologies to its citizens with disabilities as required by Section 508 of the Rehabilitation Act of 1973, and its state law counterparts. The Voluntary Product Accessibility Templates ("VPATs") for Products and the Microsoft technologies used in providing the Online Services can be found at Microsoft's VPAT page. Further information regarding Microsoft's commitment to accessibility can be found at http://www.microsoft.com/enable.

m. If any document incorporated by reference into these Microsoft License Terms and Conditions, including the Use Rights and terms included and/or referenced or incorporated herein and/or therein, contains a provision (a) allowing for the automatic termination of your license rights or Software Assurance services; (b) allowing for the automatic renewal of services and/or fees; (c) requiring the governing law to be anything other than Federal law; and/or (d) otherwise violates applicable Federal law, then, such terms shall not apply with respect to the Federal Government. If any document incorporated by reference into these Microsoft License Terms and Conditions, including the Use Rights and terms included and/or referenced or incorporated herein and/or therein contains an indemnification provision, such provision shall not apply as to the United States indemnifying Microsoft or any other party.

n. No provisions of any shrink-wrap or any click-through agreement (or other similar form of agreement) that may be provided in conjunction with any product(s) or services acquired under these Microsoft License Terms and Conditions shall apply in place of, or serve to modify any provision of these Microsoft License Terms and Conditions, even if a user or authorized officer of Enrolled Affiliate purports to have affirmatively accepted such shrink-wrap or click-through provisions. For the avoid of doubt and without limiting the foregoing, in the event of a conflict between any such shrink-wrap or click-through provisions (irrespective of the products or services that such provisions attach to) and any term or condition of these Microsoft License Terms and Conditions, then the relevant term or condition of these Microsoft License Terms and Conditions shall govern and supersede the purchase of such product(s) or services to the extent of any such conflict. All acceptance of agreements and renewals shall be executed in writing.

o. **Section headings.** All section and subsection headings used in this agreement are for convenience only and shall not affect the interpretation of this agreement

Smartronix Value-Add Cloud Services Program Authorized GSA Pricing - Azure

MFR	SIN	Model Number	Description	GSA Price w/o IFF	GSA Price w/IFF	Unit	Warr	Prod Pt
MSFT	132-40	AZURE-LOT-001	Azure Lot - $1.00 in usage fees at AZURE list price	$0.96	$0.97	EA	N/A	USA

Smartronix Value-Add Cloud Services Program provides the Government with discounts based off of the monthly CSP spend. The current Azure list prices can be found here: https://azure.microsoft.com/en-us/pricing/calculator/. The calculator will show Azure items with their associated list prices and estimated monthly spend. Smartronix utilizes this with a 4% discount to determine the Government's price estimate.

This offer includes:

Cloud Services

Provides access to Government approved cloud services from Azure.

- Azure US Commercial Regions
- Azure Government Region

Cloud Management Tool with Customized Setup Support

Provides access to Cloud Management Tool. The Cloud Management Platform (CMP) provides full visibility and control to reduce costs, improve cybersecurity posture, and automate critical tasks to accelerate cloud agility for modern enterprises and service providers. Customized support setting up budget alerts and automated reporting.

CSEM Advisory

The Smartronix Cloud Service Expense Management (CSEM) Advisory Service facilitates environmental cost optimization based on actual usage data aggregation and correlation. Recommendations are based on analysis of CSEM actuals; application of advanced tool sets to model future spend as a function of utilization and execution of "what-if" scenarios; familiarity with customer workloads and environments; and, extensive experience across customer cloud environments. The CSEM Advisory Service is included as an integrated component of the Cloud Resale and Consolidated Billing Service.

Examples of cost optimization opportunities include:

- Resource utilization (Throttling under-utilized instances; Parking off-period resources)
- Right-sizing instance type
- Selection of workload-appropriate pricing models
- Resource tagging
- Reclamation of orphaned resources
- Optimization of BYOL (Bring-your-own-license)
- Storage life-cycle management
- Cost Monitoring and Alerting

This service requires deployment of the Smartronix CSEM tool which requires read only access to the CSP billing data and optional read only access to performance data (for service utilization optimization.)

Support Services

All orders are required to purchase:

- For Azure orders: Standard Support which includes 24x7 Azure Technical Helpdesk Support with SLA response times

These are support products that are provided by the CSP and invoiced by Smartronix at the same discounted rate as the Cloud Services.

Smartronix Value-Add Cloud Services Program Authorized GSA Pricing - AWS

MFR	SIN	Model Number	Description	GSA Price w/o IFF	GSA Price w/IFF	Unit	Warr	Prod Pt
AWS	132-40	AWS-LOT-001	AWS Lot - $1.00 in usage fees at AWS list price	$.098	$0.99	EA	N/A	USA

Smartronix Value-Add Cloud Services Program provides the Government with discounts based off of the monthly CSP spend. The current AWS list prices can be found here: https://calculator.s3.amazonaws.com/index.html. The calculator will show AWS items with their associated list prices and estimated monthly spend. Smartronix utilizes this with a 2% discount to determine the Government's price estimate.

This offer includes:

Cloud Services

Provides access to Government approved cloud services from AWS.

- AWS US Commercial Regions
- AWS GovCloud Region

Cloud Management Tool with Customized Setup Support

Provides access to Cloud Management Tool. The Cloud Management Platform (CMP) provides full visibility and control to reduce costs, improve cybersecurity posture, and automate critical tasks to accelerate cloud agility for modern enterprises and service providers. Customized support setting up budget alerts and automated reporting.

CSEM Advisory

The Smartronix Cloud Service Expense Management (CSEM) Advisory Service facilitates environmental cost optimization based on actual usage data aggregation and correlation. Recommendations are based on analysis of CSEM actuals; application of advanced tool sets to model future spend as a function of utilization and execution of "what-if" scenarios; familiarity with customer workloads and environments; and, extensive experience across customer cloud environments. The CSEM Advisory Service is included as an integrated component of the Cloud Resale and Consolidated Billing Service.

Examples of cost optimization opportunities include:

- Resource utilization (Throttling under-utilized instances; Parking off-period resources)
- Right-sizing instance type
- Selection of workload-appropriate pricing models
- Resource tagging
- Reclamation of orphaned resources
- Optimization of BYOL (Bring-your-own-license)
- Storage life-cycle management
- Cost Monitoring and Alerting

This service requires deployment of the Smartronix CSEM tool which requires read only access to the CSP billing data and optional read only access to performance data (for service utilization optimization.)

Support Services

All orders are required to purchase:

- For AWS orders: Business Class Support which provides 24x7 AWS Technical Helpdesk Support with SLA response times

These are support products that are provided by the CSP and invoiced by Smartronix at the same discounted rate as the Cloud Services.

1 CLOUDASSURED MANAGED SERVICES FOR GOVERNMENT (CAMS-G)

1.1 INTRODUCTION

The CloudAssured Cloud Management Platform and optional Cloud Service Expense Management (CSEM) capabilities comprise the Smartronix CloudAssured Managed Services solution. CAMS-G gives your organization the ability to leverage the power and scalability of the cloud while reducing the cost and complexity of managing and monitoring infrastructures and applications in-house. Our experts provide complete management of cloud services from initial provisioning through the entire solution life-cycle. Our Managed Services span private, public, multicloud, and hybrid cloud offerings, allowing your organization to focus on critical business and strategic technology efforts while leaving resource-intensive IT operations to our professional team of US based cleared experts.

CAMS-G includes the software licensing and configurations for the tools required to manage and monitor your environments to meet your Service Level Agreements.

1.2 CAMS-G MANAGEMENT PORTAL

Smartronix wraps the customer experience in the CAMS-G Portal ITSM framework. The CAMS-G portal provides each customer a unique view of the delivered Managed Services solution and provides access into service request, event and incident ticket management systems. The back-office ITSM functionality is delivered via a Smartronix customized ServiceNow portal to ensure strict, organization-specific separation of customer data. Additionally, the CAMS-G Portal and supporting ServiceNow implementation can apply access governance across Smartronix personnel in case of regulatory or other Customer-specific compliance requirements (special background investigations, public clearances, or other industry-specific clearance activities.) Cloud Assured Managed Services customers can create, track, manage, and report on all of their service requests from a central location 24/7/365.

1.3 MANAGED SERVICES

The Core Services have been developed and integrated to provide customers with a fully instrumented Cloud experience. Optional Services in the catalog are designed to enhance customer experience and capabilities through delivery of discrete capabilities within the Smartronix Cloud Management Platform inclusive of the processes, procedures, tooling, and licensing necessary to deliver predictable results. **Tables 1, 2 and 3** below identify the portfolio of Core (up to FedRAMP Moderate & DoD IL2), Optional, Optional Security Services, and Department of Defense Impact Level 4.

The Smartronix cloud management framework can also address scenarios where customers may have existing tools, interoperability or business requirements that drive custom service integrations. These custom integrations are priced separately to accommodate unique licensing costs and labor required for a tailored solution.

1.4 CLOUD RESALE AND CONSOLIDATED BILLING

The Smartronix Cloud Resale and Consolidated Billing (CRCB) service delivers value-added Cloud Service Expense Management (CSEM) capabilities. Customers consume Cloud Services through re-sale from Smartronix. Re-sale customers receive a single consolidated invoice of all utilized

services across all managed accounts. Billing detail is tailored to support customer business and financial management requirements including organizational and divisional separation for show-back / chargeback purposes. The CSEM Advisory service (Optional Services) is bundled in to CRCB as part of the value-added service offering designed to optimize your cloud expense efficiency.

2   SERVICE DESCRIPTIONS

The following sections describe the Core, Optional, Optional Security Services, and Department of Defense Required Managed Services for Impact Level 4.

Table 1. CloudAssured Managed Services

	CORE Managed Services (FedRAMP Moderate/DoD Impact Level 2)
Monitoring and Notification	x
SLA Management	x
Event Management and Incident Response	x
Operating System Patch Management	x
Host Based Anti-malware Management	x
Boundary Management	x
Log Aggregation	x
Backup and Restoration	x
Infrastructure Provisioning	x

Table 2. CloudAssured Optional Managed Services

Optional Services	Optional Security Services
Cloud Service Expense Management Advisory Service	Security Incident Response
Infrastructure Advisory Service	Enhanced Log Aggregation and Analysis
Disaster Recovery	Security and Regulatory Compliance Advisory
Advanced Monitoring	Enhanced Data Encryption
Application Management	Advanced Security
Database Management	Assured Compliance Assessment Solution (ACAS)
Web and CDN Management	
Workspace Management	
Elastic Map Reduce and Redshift Management	

Table 3. Department of Defense Impact Level 4 Services

	DoD Impact Level 4 Package
Monitoring and Notification	x
SLA Management	x

Event Management and Incident Response	x
Operating System Patch Management	x
Host Based Anti-malware Management	x
Boundary Management	x
Log Aggregation	x
Backup and Restoration	x
Enhanced Data Encryption	x
Assured Compliance Assessment Solution (ACAS)	x

2.1 CORE SERVICES

2.1.1 MONITORING AND NOTIFICATION SERVICE

The Smartronix M&N Service leverages the CAMS-G Monitoring Solution (CMS) automation framework. The CMS leverages micro services to detect all assets that are tagged for management and enables a defined set of standardized alarms/alerts. Each alarm can be customized to a tagged instance definition, allowing customer environments to have different defined alarm triggers for specific workloads. The CMS framework leverages web hooks to pull in the alarms/alerts and to automate creation of ITSM tickets.

Triggers include:

*Triggers can be customized to customer workloads.

High CPU Utilization*	Instance failed health check	CSP Login authentication failures
Disk space utilization*	Root account logins	Security group changes
Excessive disk IOPs*	Object storage policy changes	Network ACL changes
Excessive disk write queue length*	IAM policy changes	Change to cloud network gateway
Excessive network utilization*	Logins without MFA	Network route table changes
High memory usage*	CloudTrail configuration changes	

2.1.2 SLA MANAGEMENT

Customer service requirements are monitored and tracked against documented Service Level Agreements (SLAs). The SLA Management Service reports service performance against standard Service Level targets identified below in Section 3. The reports are provided periodically and are designed to ensure service transparency by providing quality metrics throughout your experience. These metrics become the baseline for our ITSM Continuous Process Improvement.

2.1.3 EVENT MANAGEMENT & INCIDENT RESPONSE

The Smartronix' Event Management and Incident Response (EM&IR) Service supports identification, classification, and filtering of Events, as well as structured response for mitigation and remediation of exception Incidents within customer environments.

Event management includes detection and notification via the Monitoring and Notification Service; Filtering of events via notification service topics; and, registration of events as Informational, Warning, or Exception.

Event Warnings initiate low priority Incident response workflows. Exception Events trigger high priority Incident response processes and procedures. The Smartronix' CloudAssured team employs structured processes for the identification, classification, escalation where necessary, and remediation of managed cloud infrastructure and supported operating system incidents.

2.1.4 OPERATING SYSTEM PATCH MANAGEMENT

Smartronix' Operating System Patch Management (PM) Service monitors the availability of and proactively applies operating system patches and updates through the use of a patch management life-cycle. Smartronix' CloudAssured team performs monthly patching of guest operating systems based on the vendor release schedule. Maintenance and patching windows are coordinated with each customer to ensure operations are not impacted by system patching. The patching capability is a scripted process that will trigger the guest OS to download and apply the identified guest OS patches. The applied patches are tracked through the CloudAssured MSP system to track system configuration. Critical or security related patches are quickly escalated to the customer for approval to deploy during an out of cycle maintenance window.

Customers can opt-in (patch and update) or opt-out (do not patch, do not update) individual systems via the instance tag.

Supported Operating Systems include:

- Amazon Linux 2015.03+
- RedHat Enterprise Linux
- CentOS 6/7
- Ubuntu 12.04/14.04 LTS
- Windows 2008-2016

2.1.5 HOST BASED ANTI-MALWARE MANAGEMENT SERVICE

Smartronix' Anti-malware (AMS) Management Service protects your environment against malware (viruses, trojans, spyware/grayware) by ensuring that the CAMS-G provided antimalware is installed, up-to-date, active, and is running current malware signatures on managed OS instances. When malware is detected, we proactively ensure quarantine and automatically create an incident ticket for the remediation of the issue. Audits are performed to ensure individual server compliance with customer antimalware policies.

The service is provided through a consolidated management framework. Smartronix' CloudAssured MSP offering leverages distributed relays and customer policy-based isolation. The AMS functionality is currently provided by the TrendMicro Deep Security Suite (DSS). Smartronix deploys the Deep Security Agent (DSA) on the customer guest OS image. These instances are registered through the customer DSA relay and transmitted through encrypted IP-restricted transport to the CloudAssured Deep Security Manager (DSM). Through the DSM, policies are applied to customer agents to ensure signature updates are applied as soon as available to enable up-to-date protection of customer systems. Customers can request custom agent exclusions through the CloudAssured ServiceNow portal.

The anti-malware service protects against many file-based threats, including the following: Viruses (file infectors), Trojans, Backdoors, Worms, Network, Rootkits, Spyware, Grayware, packers, and keyloggers.

Note: For Department of Defense Impact Level 4 environments the CAMS-G provided antimalware and host IPS solution is an approved DOD Host Based Security Solution.

2.1.6 BOUNDARY MANAGEMENT

Smartronix' Boundary Management (BM) Service is a proactive monitoring and management service providing configuration management of cloud service provider components for networking, firewalls, virtual private networking (VPN), subnets, access control lists (ACLs), and virtual networks.

Our CloudAssured team will manage and monitor boundary protection and cloud environment network operations to ensure a secure and highly-available environment for customer data and applications. The BM service identifies, mitigates, and implements network level changes in response to events or customer requests. Supported change requests include VPN tunnel configuration, firewall policy changes to ACLs, IP route configurations, public IP allocation for service advertising, deployment of load balancing capabilities, and deployment of new cloud IP subnets. Technologies used in support of boundary management include:

- VPC Flow Logs
- CloudWatch Events
- M&N for ACL and Security Group changes

2.1.7 LOG AGGREGATION SERVICE

Smartronix' Log Aggregation (LA) Service captures cloud service provider logs, guest OS logs, and network logs. Alerts are generated for critical events and key performance indicators within the environment, which then automatically trigger an operational response.

Using the LA Service and Smartronix' change management process, the CloudAssured team monitors the IaaS environment for possible security incidents through event filters and alerts, and performs change management of event filters implemented to ensure known critical events are identified and escalated. This service is filter-driven by a set of unwanted event types. These events include items such as cloud infrastructure configuration changes, instance termination, and excessive CPU utilization. These event filters are customized through-out the MSP term as patterns develop from lessons learned specific to the customer's applications.

Please note that log correlation, advanced search, and analysis is not part of this service – see Security Services – Enhanced Log Aggregation and Analysis. Technologies used in support of log aggregation include:

- CloudTrail Logs
- OS Logs (SSM required)
- VPC Flow Logs
- S3

- ELB
- ALB

2.1.8 BACKUP AND RESTORATION

Smartronix' Backup (BU) Services include system, configuration, environment and cloud services backup and restore. Backups are created and stored in the customer's cloud environment and data storage costs associated with backups are part of the customer cloud environment operating costs.

BU Services includes scheduled point in time disk volume snapshots to backup iterations of the storage volume. The service can be customized to retain backups for a customer-specified duration. The duration of backup retention will have an impact on cloud storage costs. Through the ITSM process, the CloudAssured team can restore system volumes to a customer-specified point-in-time. Prior to restoration of the requested volumes, a new snapshot will be captured to ensure a rollback is available if the restore is unsuccessful. Backup and restore testing is performed annually to ensure backup consistency.

2.1.9 INFRASTRUCTURE PROVISIONING

Smartronix Infrastructure Provisioning (IP) services ensure consistent and repeatable deployment of cloud infrastructure. Customers submit IP requests through the CloudAssured ITSM portal for any service that requires management. Smartronix receives the requests, confirms the requirements, provisions the resource, and instruments the resource to ensure any core or additionally procured managed service is configured appropriately for M&N, SLA, ER&IR, AMS, BU, PM, and LA services.

Core Infrastructure Provisioning covers:

- Compute
- Storage
- Boundary Configuration
- Identity and Access Management Credentials
- Load Balancers
- Workspace provisioning

2.2 OPTIONAL SERVICES

2.2.1 CSEM ADVISORY

The Smartronix Cloud Service Expense Management (CSEM) Advisory Service facilitates environmental cost optimization based on actual usage data aggregation and correlation. Recommendations are based on analysis of CSEM actuals; application of advanced tool sets to model future spend as a function of utilization and execution of "what-if" scenarios; familiarity with customer workloads and environments; and, extensive experience across customer cloud environments. The CSEM Advisory Service is included as an integrated component of the Cloud Resale and Consolidated Billing Service. Examples of cost optimization opportunities include:

- Resource utilization (Throttling under-utilized instances; Parking off-period resources)

- Right-sizing instance type
- Selection of workload-appropriate pricing models
- Resource tagging
- Reclamation of orphaned resources
- Optimization of BYOL (Bring-your-own-license)
- Storage life-cycle management
- Cost Monitoring and Alerting

This service requires deployment of the Smartronix CSEM tool which requires read only access to the CSP billing data and optional read only access to performance data (for service utilization optimization.)

2.2.2 INFRASTRUCTURE ADVISORY

Smartronix' Infrastructure Advisory (IA) Services provides prescriptive guidance on cloud services optimization, including capacity management reviews, architectural reviews and best practices reviews, auto scaling tuning, and migration paths for on premise workloads. These reviews leverage our CloudAssured - Well Architected guidelines and ITSM process.

The CloudAssured - Well Architected Review is a detailed analysis of your infrastructure, a thorough review of security practices, application integration architectures, and sizing of resources. This review enables Smartronix' CloudAssured team to ensure customers are leveraging cloud services in line with CSP best practices while delivering cost effective and secure service delivery.

2.2.3 DISASTER RECOVERY

Smartronix' Disaster Recovery (DR) Service defines a DR architecture and processes to provide full planning, annual testing and execution of a managed disaster recovery solution encompassing applications, systems, and environments. Our CloudAssured team will work with you to ensure your Recovery Time Objective/Recovery Point Objective (RTO/RPO) are appropriate to your mission and to architect the solution to fulfill the requirements at the lowest cost.

2.2.4 ADVANCED MONITORING

Smartronix' Advanced Monitoring (AM) Service provides deeper visibility into your entire environment. Using header tags, synthetic transactions, agent based heath tools, and state-of-the-art tools, processes, and best practices, the Smartronix CloudAssured team will configure advanced monitoring to discover and optimize a comprehensive suite of availability and performance metrics.

2.2.5 APPLICATION MANAGEMENT

Smartronix' Application Management (AM) Service delivers COTS and custom-built applications under the managed Platform-as-a-Service (PaaS) or Software-as-a-Service (SaaS) model. This includes monitoring, maintenance, backup and restore, configuration management, patching and security assessments, and is designed to meet specific availability and/or performance SLAs.

2.2.6 DATABASE MANAGEMENT

Smartronix' Database Management (DBM) Service is a full-lifecycle capability available for industry- leading RDBMSs. This includes monitoring, maintenance, backup and restore, configuration management, patching and security assessments, and is designed to meet specific availability and/or performance SLAs.

2.2.7 WEB MANAGEMENT AND CDN

Smartronix' Web Management and CDN (WMC) Service provides monitoring, availability, maintenance, security and configuration management for web applications and frameworks, including the operations and management of third party CDN services. We provide proactive security monitoring of the site distribution, availability monitoring, maintenance, configuration management, patching and security of the environment and applications. External availability and performance monitoring is also available.

2.2.8 HELP DESK

Smartronix' Help Desk (HD) provides front line (Tier 1) support for end users in your organization. Smartronix' CloudAssured team user support specialists create and track issues from report to resolution, collecting and documenting circumstances, researching and recommending resolution activities, and ensuring customer satisfaction or timely escalation for prompt closure.

2.2.9 WORKSPACES MANAGEMENT

Smartronix' Workspaces Managed Services (WMS) brings server-class management and assurance to virtual desktop users. WMS includes operating system patch and update management, software packaging, and software lifecycle management (deployment, configuration management, updating, and deprovisioning). Workspaces Management Services Backups let you choose an RPO that's right for your organization and know that your virtual workstation data is protected. Antivirus and antimalware are included, and compliance is enforced. Integration with your existing directory service means organizational configurations, policies, and controls are applied to your Workspaces and managed by Smartronix WMS the same as they are for your servers.

2.2.10 ELASTIC MAP REDUCE AND REDSHIFT MANAGEMENT

Smartronix' EMR and Redshift Support (ERS) Service provides enhanced visibility into your running AWS big data environment. Using tags and monitoring capabilities designed specifically for Amazon EMR and Amazon Redshift, the Smartronix CAMS-G Cloud Management platform alerts on exceptions and abnormalities, provides proactive notification to client contacts, and expedites troubleshooting and administrative support.

ERS is priced on a per cluster / per month basis, and covers the following health, security, availability, cost, and performance dimensions:

- Cluster Management
- Cluster RI analysis
- Snapshot management and restore

- Add or remove cluster nodes – ad hoc requests
- Database Audit Logging
- Resize requests
- Cost optimization
- Capacity monitoring / Disk Space Alarm management
- User Management / Permissions Management (GRANT/REVOKE etc.)

ERS support also provides the extra level of expertise, consultancy, or staffing needed to meet your most complex and sophisticated usage scenarios. We support customers from the small businesses to large enterprise and public sector, and can offer a customer-specific solution priced to match your needs and customized to your environment.

ERS support services for Amazon EMR and Amazon Redshift include:

- Version upgrade support
- Database upgrade support
- Table resorts
- Cluster renaming and resizing
- Enhanced VPC Routing support and Endpoints
- Table level restores
- Database Encryption
- Key Rotation
- Query / Load Performance monitoring
- Performance optimization
- Log management (Connection, User, User Activities)
- Schema creation
- Workload management configuration
- Schema management
- Troubleshooting and Break Fix support

2.3   OPTIONAL MANAGED SECURITY SERVICES

2.3.1   SECURITY INCIDENT RESPONSE

Smartronix' Security Incident Response (SIR) Service provides analysis, tracking, and corrective actions for issues impacting customer environments. Smartronix' CloudAssured team will support the incident response process through incident escalation, break/fix remediation of infrastructure and guest operating systems, support of in-scope disaster recovery, system restore, instance isolation, and event information reporting related to the cloud environment and guest operating systems. The CloudAssured IR capability can also be leveraged by customer application teams to help identify application-impacting problems related to the environment or guest operating systems.

2.3.2 ENHANCED LOG AGGREGATION AND ANALYSIS

Smartronix' Enhanced Log Aggregation and Analysis (ELAA) Service is captures all events, logs, audit information and monitoring information provided by operating systems, platforms, networks, applications and infrastructure. Alerts are defined for key events within the environment to trigger further analysis or incident response.

ELAA extends the core *Log Aggregation* service by integrating search capabilities, counters, and proactive log review analysis. The *Analysis* capability enables the correlation of events by generating a process chain. For example, a web site health check failure can be linked to a john.doe login and a john.doe action of stopping the web service. The standard Log Aggregation event filter service will only identify the user logged on, the user stopped a service, or the web health check failed, but the causality link between events would be a manual process. The search capability also enhances the ability of the customer's applications teams to quickly identify underlying system events linked to a service incident.

2.3.3 SECURITY AND REGULATORY COMPLIANCE ADVISORY

Smartronix' Security and Regulatory Compliance Advisor (SRCA) Service utilizes Global Intelligence for security and threat analytics to provide clients guidance in regulatory requirements and recommend mitigation of threats that have potential to impact client-specific environments as they appear and evolve. Email notification is provided the day of significant threats are surfaced in industry analyses.

Monthly Summaries are provided by the 10th day of the following month.

2.3.4 ENHANCED DATA ENCRYPTION

Smartronix' Enhanced Data Encryption (EDE) Service is a custom solution. Smartronix' CloudAssured team works with the customer to define a service architecture compliant with their regulatory or policy requirements, and then implements the architecture with encryption built-in. The CAMS-G team provides all support for encryption key management and rotation, encryption of volumes and data, and implementation and management of service encryption certificates.

Areas of applicable support include:

- Use of cloud or collocated hardware security modules
- Database, disk volume, object store, and/or application level encryption
- End-to-end security – data ingestion, data at rest, data in transit, data in use, and data extraction
- Certificate management for secure protocols (SSL, HTTPS, TLS, etc.)
- Key lifecycle management (creation, deployment, expiration, rotation, invalidation)

Note: For Department of Defense Impact Level 4 environments the solution will use an approved DoD Impact Level 4 encryption (such as AWS KMS and Azure Key Vault) for enforcement of cloud virtual server volume, data base, and object storage encryption.

2.3.5 ADVANCED SECURITY

Smartronix' Advanced Security (AS) Services is a custom solution. Our CloudAssured team works with your security organization to implement layered, comprehensive protection against data loss, advanced identity management services, host based intrusion detection/intrusion prevention solutions (IDS / IPS / HIPS), security assessments, security vulnerability scanning, and continuous security monitoring. AS Services is a foundational capability for creating high security enclaves in cloud environments.

2.3.6 ASSURED COMPLIANCE ASSESSMENT SOLUTION (ACAS)

Smartronix' Assured Compliance Assessment Solution (ACAS) Service utilizes Tenable's Nessus Security Scanner and Nessus Security Manager. The ACAS service enables the assessment of networks and connected IT systems against DoD standards and identifies any known system vulnerabilities, the solution offers automated network vulnerability scanning, configuration assessment, application vulnerability scanning, device configuration assessment, and network discovery.

3 SERVICE LEVEL AGREEMENTS

3.1 SLA 1: SYSTEM AVAILABILITY

SLA 1: "System" Availability	
Description	This SLA applies to "system availability" of a service. A system is considered a series of components that make up the infrastructure service that hosts and provides the compute and storage capabilities consumed by the customer applications and services. System availability applies to the following products and services: • Virtual Compute Instances (AWS EC2 and Azure Virtual Machines deployed in the same availability set) • Block Storage (AWS EBS, Azure System/Data Disks) Smartronix SLA incorporates the AWS and Azure SLA terms defined below which are subject to change in accordance with the AWS and Azure Agreements. AWS Compute SLA: https://aws.amazon.com/ec2/sla/ Microsoft Azure Compute SLA: https://azure.microsoft.com/en-us/support/legal/sla/virtual-machines/v1_6/
Measurement	Smartronix will measure system infrastructure availability by using tools that will access the cloud infrastructure compute availability at 5 minute intervals to analyze cloud IaaS regional compute availability.
Calculation	NUMERATOR Uptime (Seconds) ÷ DENOMINATOR= Total amount of time (seconds) for the monitoring period = RESULT Service Level (%) Attained.
Success Criteria	Smartronix will be considered successful if the system is fully available for use 99.95% of the time.

Exceptions / Conditions	Instances scheduled to occur during the following periods are excluded from the Numerator and Denominator for calculation purposes:
	 Downtime approved by customer; and
	 Downtime due to events outside Smartronix control and approved as such by customer.
	 Examples of these type of exception events include:
	     Force majeure events; and
	     Outages determined to be caused by customer or customer contractor-developed application code provided by customer.
	 Systems must be implemented in a functional high availability configuration.

3.2 SLA 2: BACKUP AND RESTORATION

SLA 2: Backup and Restoration	
Description	This SLA measures the percent of times that the platform is restored to last agreed and documented state and last transactional dataset after failure, data loss or user request for restoration.
Measurement	Initiation of restore for individual file or database requests within 8 hours of receipt of request or notification of failure Backup retention periods are defined by Client.
Calculation	NUMERATOR: Number of successful restore initiations within 8 hours or Number of full restoration within 48 hours ÷ DENOMINATOR: Number of Requests for Restores = RESULT Service Level (%) Attained.

Success Criteria	Smartronix will be considered successful if successfully restored 95% of the time as measured on a Monthly basis.
Exceptions / Conditions	SLA's may not be met during Client Disaster Recovery and Client Disaster Recovery exercises, during those periods best effort will replace the SLA.

3.3   SLA 3: INCIDENT RESPONSE

SLA 3: Incident Response Time	
Description	This SLA measures Smartronix' response time, per the Exceptions/Conditions in this SLA, following issue identification.
Measurement	SLA attainment is validated by 100% inspection of reporting documentation.
Calculation	NUMERATOR: Number of incident receiving response within time for given severity level ÷ DENOMINATOR: Total number of Incidents = RESULT: Service Level (%) Attained.
Success Criteria	Smartronix is successful if 95% of incidents receive a response within response time for given severity level, as measured on a monthly basis.
Exceptions / Conditions	Severity 1 - Critical - An entire service is down. All users affected. Within 1 hour of incident occurring 24x7x365. Severity 2 - High - Operation of the service is severely degraded, or major components of the services are not available. Significant user impact. Within 2 hours of incident occurring 24x7x365. Severity 3 - Medium - Some non-essential features of the service are impaired or subject to interruptions while most vital components of the service remain functional. Minimal user impact. Within 24 hours of incident occurring during business hours. (8am-8pm EST M-F). Severity 4 - Low - Errors that are minor and clearly have little to or no impact on the normal operation of the service. No or minimal user impact. Within 1 business day of incident occurring during business hours. (8am-8pm EST M-F). Exception: Impending events notification - incident response will be initiated before follow-up notification as clients will be previously notified (SLA 5) of the likelihood of the event.

3.4   SLA 4: OPERATING SYSTEM PATCHING AND UPDATING

SLA 4 – Operating System Patching	
Description	This SLA measures Smartronix' ability to patch all operating systems protecting on a planned schedule. All critical patches will be applied in accordance to the client planned schedule that will be defined in the Concept of Operations document. All other patches will be executed upon a customer pre-approved schedule.
Measurement	All operating systems will be up to date with critical patches within 10 days of release and measured by scanning with vulnerability software.
Calculation	NUMERATOR: Total number of patched systems within 10 calendar days of critical patch release ÷ DENOMINATOR: Number of systems requiring patches = RESULT: Service Level (%) Attained.

Success Criteria	Smartronix is considered successful when 95% of critical patches are applied to the initial environment within 10 calendar days of release from vendor and subsequent patches are applied per the customer patch schedule. Patches must be approved by customer. This will be measured on a monthly basis.
Exceptions / Conditions	Ten (10) day SLA applies to the initial environment patched. Patching of subsequent environments follow customer patch schedule. Smartronix failure to execute patching of subsequent environments per customer patch schedule shall also be considered an SLA failure for purposes of the Calculation. Any patches not approved by customer or Smartronix' CCB are excluded from the SLA Calculation.

3.5   SLA 5: IMPENDING EVENT NOTIFICATION

SLA 5 – Impending Event Notifications	
Description	Smartronix will notify the customer of the possibility of an impending event or events that have occurred which might affect system operation. Examples include cloud service provider notifying Smartronix of service degradation, service unavailability, or service termination.
Measurement	Smartronix will measure impending event notification based on reporting within 1 hour of detection of the event or impending event.
Calculation	Best Effort. Availability SLA ultimately determines client access to the system or service.
Success Criteria	N/A
Exceptions / Conditions	Events outside of Smartronix control are not included.

3.6   SLA 6: DATABASE MANAGEMENT SERVICE REQUEST

SLA 6 – Service Request – Database Management	
Description	Smartronix will initiate requested support on-demand functions for Database support made by the customer within one business day. Examples include request for database refresh from prod to Test or development, launching database instances, preforming performance analysis.
Measurement	Smartronix will measure request response based on the time requested as documented in the ITSM reporting system and the request initiation being within 1 business day.
Calculation	NUMERATOR: Number of successful request initiations within 1 business day ÷ DENOMINATOR: Number of Requests = RESULT Service Level (%) Attained.
Success Criteria	Smartronix will be considered successful if successfully initiated responses 95% of the time as measured on a Monthly basis.
Exceptions / Conditions	SLA's may not be met during Client Disaster Recovery and Client Disaster Recovery exercises, during those periods best effort will replace the SLA.

3.7 SLA 7: IMPENDING SECURITY THREAT NOTIFICATION

SLA 7: Impending Security Threat Notifications	
Description	Smartronix will notify the Client of the possibility of an impending Security Threat or events that have occurred which may impact system operation. Examples include global intelligence sources identifying new threats in the environment that may impact OS, Applications, or services used by Client.
Measurement	Smartronix will measure impending event notification based on reporting within 1 hour of detection of the event or impending threat
Calculation	Best Effort. Availability SLA ultimately determines client access to the system or service.
Success Criteria	N/A
Exceptions / Conditions	Events outside of Smartronix control are not included.

*SLA usage can vary dependent on services purchased.

3.8 PRICING

Table 4. Core Managed Services

Service Title	Price
Monitoring and Notification **SLA Management** **Incident Response** **Operating System Patch Management** **Antivirus (AV) Management** **Boundary Management** **Log Aggregation (Basic)** **Backup Services**	$292.18/instance per month
Infrastructure Provisioning Service	$48.86/Provisioning Request

Table 5. Optional Services

Service Title	Price
Cloud Service Expense Management Advisory Service	1.25% of Invoice monthly Or provided as part of Resell Bundle
Advanced Monitoring Services	$97.73/ instance / month
Application Management Services	$293.18/ instance / month
Database Management Services	$390.91/ instance / month
Web Management Services and CDN	$390.91/ site distribution / month
Elastic Map Reduce and Redshift Management	$4,886.38/ cluster / month
Workspaces Management Services	Tier per Workspace Instance Fee / month $24.43 Per less than 150 Instances $22 for 150 through 300 $18 for 300 through 700 $14 Greater than 700

Table 6. Optional Security Services

Service Title	Price
Enhanced Log Aggregation and Analysis	Log Monitoring and Analysis - $312.73/per GB of indexed data, based on average daily consumption in a month.
Security & Regulatory Compliance Advisory Service	$5,863.65/month
Advanced Security Services	$146.59/ instance / month
Assured Compliance Assessment Solution (ACAS)	$2,443.19/per month block of 50 instances

Table 7. Department of Defense IL4 Managed Services

Service Title	Price

Monitoring and Notification	$518.86/instance per month
SLA Management	
Incident Response	
Operating System Patch Management	
Host Based Antivirus (AV) Management	
Boundary Management	
Enhanced Log Aggregation and Analysis	
Backup Services	
Enhanced Data Encryption Services	
Assured Compliance Assessment Solution (ACAS)	
Infrastructure Provisioning Service	$48.86/Provisioning Request

Notes:

- Customized service/pricing for customer environments that have reduced requirements, e.g. Development, Test, Quality Assurance, or Labs is available.
- Clients are required to enable Config, CloudTrail, CloudWatch, and allow SMX to install AWS CloudWatch agent and AWS Inspector Agent on managed instances in regions that run services supported by Smartronix.
- Smartronix will reserve one AWS resource tag for use in the management of the resources.

3.9   DISCOUNT SCHEDULE

Monthly Cost	Discount Tier
$0 - $15,000	0%
$15,001 - $30,000	2.5%
$30,001 - $45,000	5%
$45,001 - $60,000	10%
$60,001 - $100,000	12.5%
$100,001 - $500,000	15%
$500,001 -$1,000,000	17.5%
Over $1,000,001	20%

PREAMBLE:

Smartronix, Inc. provides commercial products and services to ordering activities. We are committed to promoting participation of small, small disadvantaged and women-owned small businesses in our contracts. We pledge to provide opportunities to the small business community through reselling opportunities, mentor-protégé programs, joint ventures, teaming arrangements, and subcontracting.

COMMITMENT:

- To actively seek and partner with small businesses.

- To identify, qualify, mentor and develop small, small disadvantaged and women-owned small businesses by purchasing from these businesses whenever practical.

- To develop and promote company policy initiatives that demonstrates our support for awarding contracts and subcontracts to small business concerns.

- To undertake significant efforts to determine the potential of small, small disadvantaged and women-owned small business to supply products and services to our company.

- To insure procurement opportunities are designed to permit the maximum possible participation of small, small disadvantaged and women-owned small businesses.

- To attend business opportunity workshops, minority business enterprise seminars, trade fairs, procurement conferences, etc., to identify and increase small businesses with whom to partner.

- To publicize in our marketing publications our interest in meeting small businesses that may be interested in subcontracting opportunities.

We signify our commitment to work in partnership with small, small disadvantaged and women-owned small businesses to promote and increase their participation in ordering activity contracts. To accelerate potential opportunities please contact Melinda Armsworthy at the Smartronix, Inc. Contracts Department at Phone: (301) 373-6000; Fax: (301) 373-7176; Email: marmsworthy@smartronix.com

BEST VALUE BLANKET PURCHASE AGREEMENT

<div align="center">

FEDERAL SUPPLY SCHEDULE

</div>

(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 Supply 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

(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); and

(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 Contractor's invoice, the provisions of this BPA will take precedence.

Federal Supply Schedule Contractors may use "Contractor Team Arrangements" (see FAR 9.6) to provide solutions when responding to an ordering activity requirements.

These Team Arrangements can be included under a Blanket Purchase Agreement (BPA). BPAs are permitted under all Federal Supply Schedule contracts.

Orders under a Team Arrangement are subject to terms and conditions or the Federal Supply Schedule Contract.

Participation in a Team Arrangement is limited to Federal Supply Schedule Contractors.

Customers should refer to FAR 9.6 for specific details on Team Arrangements.

Here is a general outline on how it works:

- The customer identifies their requirements.

- Federal Supply Schedule Contractors may individually meet the customer's needs, or -

- Federal Supply Schedule Contractors may individually submit a Schedules "Team Solution" to meet the customer's requirement.

- Customers make a best value selection.

SMARTRONIX, INC.

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