GENERAL SERVICES ADMINISTRATION
Federal Supply Service
Authorized Federal Supply Schedule Pricelist

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

MULTIPLE AWARD SCHEDULE

Schedule Contract Number
GS-35F-080CA

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

Contract Period: November 21, 2014 through November 20, 2024

Contract current through Modification PA-0025 effective July 6, 2020
Mass Modification A826 effective November 18, 2020

General Dynamics Information Technology, Inc.
3150 Fairview Park Drive
Suite100
Falls Church VA 22042-5373
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Irina.Safarcheva@gdit.com

A Large Business

LARGE CATEGORY: INFORMATION TECHNOLOGY
SUBCATEGORY: IT SERVICES

Special Item Number 54151S Information Technology Professional Services

IT Professional Services and/or labor categories for database planning and design; systems analysis, integration, and design; programming, conversion and implementation support; network services, data/records management, and testing.

FSC/PSC Code: D399

Special Item Number 54151HEAL Health Information Technology Services

Includes a wide range of Health IT services to include connected health, electronic health records, health information exchanges, health analytics, personal health information management, innovative Health IT solutions, health informatics, emerging Health IT research, and other Health IT services.

FSC/PSC Code: D399

Special Item Number 54151HACS Highly Adaptive Cybersecurity Services (HACS)

Includes a wide range of fields such as, the seven-step Risk Management Framework services, information assurance, virus detection, network management, situational awareness and incident response, secure web hosting, and backup, security services and, Security Operations Center (SOC) services. HACS vendors are cataloged under the 5 subcategories of High Value Asset Assessments; Risk and Vulnerability Assessments, Cyber Hunt, Incident Response, and Penetration Testing.

FSC/PSC Code: DJ01

LARGE CATEGORY: INFORMATION TECHNOLOGY
SUBCATEGORY: IT SOFTWARE

Special Item Number 54151 Software Maintenance Services

Software maintenance services creates, designs, implements, and/or integrates customized changes to software that solve one or more problems and is not included with the price of the software. Software maintenance services includes person-to-person communications regardless of the medium used to communicate: telephone support, online technical support, customized support, and/or technical expertise which are charged commercially.

FSC/PSC Code: DA01

LARGE CATEGORY: INFORMATION TECHNOLOGY
SUBCATEGORY: IT SOLUTIONS

Special Item Number 518210C Cloud and Cloud-Related IT Professional Services

Includes commercially available cloud computing services such as Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS) and emerging cloud services. IT professional services that are focused on providing the types of services that support the Government's adoption of, migration to or governance/management of Cloud computing. Specific labor categories and/or fixed price solutions (e.g. migration services, etc.) that support activities associated with assessing

Cloud solutions, refactoring workloads for Cloud solutions, migrating legacy or other systems to Cloud solutions, providing management/governance of Cloud solutions, DevOps, developing cloud native applications or other Cloud oriented activities**.**

FSC/PSC Code: D305

Special Item Number 541370GEO Earth Observation Solutions

Provides geospatial earth observation technologies, products, and services to include, but not limited to ground, satellite and aerial based sensor data and imagery; worldwide digital transmission, internet, data, and video services and products through various networks, platforms, and applications. Offerings include global coverage, imagery, analysis, as a service, change detection, human geography, observation as a service, archive storage and distribution, monitoring, basemaps (mosaics), and earth observation solutions for accurate, mission critical information for uses to include, but not limited to, environmental, agriculture, meteorology, forestry, fish & wildlife habitats, disaster response and recovery, defense, maritime, mapping, humanitarian support, transportation, and public safety.

FSC/PSC Code: D399

Special Item Number 541519PIV Homeland Security Presidential Directive 12 Product and Service Components

PIV products and PIV services to implement the requirements of HSPD-12, FIPS-201 and associated NIST special publications. implementation components specified under this SIN are: * PIV enrollment and registration services, * PIV systems infrastructure, * PIV card management and production services, * PIV card finalization services, * Logical access control products and services, * PIV system integration services. Installation services and FIPS 201 compliant PACS (Physical Access Control System) products.

FSC/PSC Code: D399

Special Item Number 54151ECOM Electronic Commerce and Subscription Services

Includes value added network services, e-mail services, Internet access services, electronic subscription services, data transmission services, and emerging electronic commerce technologies.

FSC/PSC Code: D304

LARGE CATEGORY: MISCELLANEOUS
SUBCATEGORY: COMPLEMENTRY SINs

Special Item Number Ancillary Ancillary Supplies and Services

Ancillary supplies and/or services are support supplies and/or services which are not within the scope of any other SIN on this schedule. These supplies and/or services are necessary to compliment a contractor's offerings to provide a solution to a customer requirement. This SIN may be used for orders and blanket purchase agreements that involve work or a project that is solely associated with the supplies and/or services purchased under this schedule.

FSC/PSC Code: 0000

Special Item Number OLM Order-Level Materials (OLM)

OLMs are supplies and/or services acquired in direct support of an individual task or delivery order placed against a Schedule contract or BPA. OLM pricing is not established at the Schedule contract or BPA

level, but at the order level. Since OLMs are identified and acquired at the order level, the ordering contracting officer (OCO) is responsible for making a fair and reasonable price determination for all OLMs.

OLMs are procured under a special ordering procedure that simplifies the process for acquiring supplies and services necessary to support individual task or delivery orders placed against a Schedule contract or BPA. Using this new procedure, ancillary supplies and services not known at the time of the Schedule award may be included and priced at the order level.

OLM SIN-Level Requirements/Ordering Instructions:

OLMs are:

- Purchased under the authority of the FSS Program
- Unknown until an order is placed
- Defined and priced at the ordering activity level in accordance with GSAR clause 552.238-115 Special Ordering

Procedures for the Acquisition of Order-Level Materials. (Price analysis for OLMs is not conducted when awarding the FSS contract or FSS BPA; therefore, GSAR 538.270 and 538.271 do not apply to OLMs)

- Only authorized for use in direct support of another awarded SIN.
- Only authorized for inclusion at the order level under a Time-and-Materials (T&M) or Labor-Hour (LH) Contract Line Item Number (CLIN)
- Subject to a Not To Exceed (NTE) ceiling price

OLMs are not:

- "Open Market Items"
- Items awarded under ancillary supplies/services or other direct cost (ODC) SINs (these items are defined, priced, and awarded at the FSS contract level)

OLM Pricing:

- Prices for items provided under the Order-Level Materials SIN must be inclusive of the Industrial Funding Fee (IFF).
- The value of OLMs in a task or delivery order, or the cumulative value of OLMs in orders against a FSS BPA awarded under an FSS contract, cannot exceed 33.33%.

NOTE: When used in conjunction with a Cooperative Purchasing eligible SIN, this SIN is Cooperative Purchasing Eligible.

NOTE: Subject to Cooperative Purchasing

FSC/PSC Code: 0000

Table of Contents

CONTRACTOR INFORMATION 7
SOFTWARE MAINTENANCE SERVICES (SIN 54151– ENOSIS) 11
Cloud and Cloud-Related IT Professional Services 11
SIN 518210C-Cloud Computing Services IaaS (Infrastructure as a Service) Pricing 13
Earth Observation Solutions 13
SIN 541370GEO – Earth Observation Solutions Labor Category Requirements and Descriptions 14
Earth Observation Solutions Labor Category-Rates 23
Highly Adaptive Cybersecurity Services 23
SIN 54151HACS – Highly Adaptive Cybersecurity Services (HACS) Labor Category Requirements and Descriptions 24
HIGHLY ADAPTIVE CYBERSECURITY SERVICES - RATES 58
IT PROFESSIONAL SERVICES 61
SIN 54151S - Labor Category Requirements and Descriptions 61
IT PROFESSIONAL SERVICES - RATES 100
ELECTRONIC COMMERCE AND SUBSCRIPTION SERVICES 103
SIN 54151ECOM – Electronic Commerce Services Descriptions 103
SIN 54151ECOM – Infrastructure as a Service Offering – Cloud Computing Services Pricing 107
Special Item 54151ECOM – PS4 Service Pricing 114
HEALTH INFORMATION TECHNOLOGY SERVICES 117
SIN 54151HEAL – Health IT Labor Category Requirements and Descriptions 118
HEALTH IT PROFESSIONAL SERVICES - RATES 151
SIN 541519PIV HSPD-12 AUTHENTICATION PRODUCTS AND SERVICES DESCRIPTION 154
GDIT HSPD-12 Managed Service Pricing – with Volume Discounts 156
SIN ANCILLARY – Ancillary Services to support SIN 541370GEO Earth Observation Solutions, SIN 54151S IT Professional Services and SIN 54151HEAL Health IT Services 158
SIN ANCILLARY – Ancillary Services Labor Category Requirements and Descriptions to support SIN 541370GEO Earth Observation Solutions 158
SIN ANSILLARY- Ancillary services rates supporting SIN 541370GEO Earth Observation Solutions 159
SIN ANCILLARY –Ancillary Services Labor Category Requirements and Descriptions to support SIN 54151S IT Professional Services 160
SIN ANCILLARY- Ancillary services rates supporting SIN 54151S IT Professional Services 168
SIN ANCILLARY –Ancillary Services Labor Category Requirements and Descriptions to support SIN 54151HEAL Health IT Professional Services 169
SIN ANCILLARY- Ancillary services rates supporting SIN 54151HEAL Health IT Professional Services 178
SCA MATRIX 179
SIN OLM- Order-Level Materials 180

About Us

General Dynamics Information Technology provides information technology (IT), systems engineering and professional services to customers in the defense, intelligence, homeland security, federal civil and commercial sectors.

With approximately 28,000 employees worldwide, the company utilizes its deep mission understanding to deliver proven IT services and enterprise solutions in support of more than 1,000 customer communities. As a trusted systems integrator for more than 50 years, General Dynamics enables customers to achieve their expanding mission requirements, meet enterprise goals, and accomplish business objectives on-time and on-budget.

General Dynamics Information Technology is one of four companies that make up General Dynamics' Information Systems and Technology Group. Headquartered in Fairfax, Va., General Dynamics Information Technology has major offices worldwide.

General Dynamics, headquartered in Falls Church, Virginia, employs approximately 95,000 people worldwide. The company is a market leader in business aviation; land and expeditionary combat systems, armaments and munitions; shipbuilding and marine systems; and information systems and technologies.

Delivering the strength of information technology and professional services

Large-scale IT systems and communications networks are the strategic and operational heart of defense, intelligence, civilian government and private business. Everything depends on them – from ensuring mission success to transforming enterprises to navigating the challenges of the future. Achieving these goals requires more than traditional IT solutions, which these days have become commodities.

Strong solutions demand Strong IT: the integration of forward-looking technology, strategy, domain understanding and management. This is our approach at General Dynamics Information Technology.

General Dynamics Information Technology delivers services, solutions and products to our customers through our core capabilities:

- Information Technology and Telecommunications
- Geospatial Analysis
- Geospatial Enterprise Management
- Network Systems Integration
- Professional and Technical Services
- Earth Observation Solutions
- Health IT
- Cybersecurity Services
- Simulation and Training
- Cloud Computing Services
- Wireless

CONTRACTOR INFORMATION

1a. Table of awarded Special Item Numbers:

54151	Software Maintenance Services (ENOSIS SW only)
548210C	Cloud and Cloud-Related IT Professional Services
541370GEO	Earth Observation Solutions
54151HACS	Highly Adaptive Cybersecurity Services (HACS)
54151S	Information Technology Professional Services
54151ECOM	Electronic Commerce and Subscription Services
54151HEAL	Health IT Professional Services
541519PIV	HSPD-12 Product and Service Components
ANCILLARY	Ancillary Supplies and Services
OLM	Order-Level Materials

1b. Identification of lowest priced model number and corresponding price for each awarded Special Item Number:

Please refer to p. 13 through 177, below

1c. Identification of Services and Hourly Rates:

Please refer to p. 13 through 177, below.

2. Maximum Order:

54151	$500,000
548210C	$500,000
541370GEO	$1,000,000
54151HACS	$500,000
54151S	$500,000
54151ECOM	$500,000
54151HEAL	$500,000
541519PIV	$1,000,000
ANCILLARY	$250,000
OLM	$250,000

NOTE TO ORDERING ACTIVITIES: If the best value selection places your order over the applicable Maximum Order Threshold, you have an opportunity to obtain a better schedule contract price. Before placing your order, contact the Contactor for a better price. The Contractor may (1) offer a new price for this requirement, (2) offer the lowest price available under this contract or (3) decline the order. A delivery order that exceeds the maximum order may be placed under the schedule contract in accordance with FAR 8.404.

3. Minimum Order: $100

4. Geographic Coverage: Domestic delivery is delivery within the 48 contiguous states, the 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

5. Point of Production: Fairfax, Virginia, United States of America

6. Discount from Commercial List Price or Market Rate:

The GSA Net Prices published on the GSA Advantage website reflect the fully burdened price. The negotiated discount has been applied and the Industrial Funding Fee has been added.

7. Quantity Discounts: Not Applicable

8. Prompt Payment Terms: Net 30 days

Information for Ordering Offices: Prompt payment terms cannot be negotiated out of the contractual agreement in exchange for other concessions.

9. Government Purchase Card:

Accepted for sales at or below the micro-purchase threshold

For purchases above the micro-purchase threshold, acceptance will be determined on a procurement-by-procurement basis.

10. Foreign Item(s): Not Applicable

11a. Time of Delivery:

As negotiated with the Ordering Activity

11b. Expedited Delivery: Please contact the Contract Administrator for availability and rates.

11c. Overnight and 2-day Delivery: Please contact the Contract Administrator for availability and rates.

11d. Urgent Requirements: Please contact the Contract Administrator for availability and rates.

12. F.O.B. Point: Destination

13a. Ordering Address:

Matthew Lammer
Operations Sr. Manager
General Dynamics Information Technology, Inc.
3150 Fairview Park Drive, Suite100
Falls Church VA 22042-5373
Telephone: 703-995-5372
Facsimile: 703-383-6087
GDITGSA@GDIT.com

13b. Ordering Procedures:

For supplies and services, the ordering procedures and information on Blanket Purchase Agreements (BPA's) are found in Federal Acquisition Regulation (FAR) 8.405-3.

14. Payment Address:

General Dynamics Information Technology, Inc.
PNC Bank, N.A
P.O. Box 643014
Pittsburgh PA 15264-3014

15. Warranty Provision:

Performed in accordance with contract requirements for IT Professional Services, Health IT Professional Services and Manufacturer's Standard Commercial Warranty for Software Maintenance, Electronic Commerce Services and HSPD-12 Products and Services.

16. Export Packing Charges: Not Applicable

17. Terms and conditions of Government purchase card acceptance:

Please contact the Contractor for additional information.

18. Terms and conditions of Rental, Maintenance, and Repair: Not Applicable

19. Terms and conditions of Installation: Not Applicable

20. Terms and conditions of Repair Parts indicating date of parts price lists and any discounts from list prices: Not Applicable

20a. Terms and conditions for any other Service: Not Applicable

21. List of Service and Distribution Points: Not Applicable

22. List of Participating Dealer: Not Applicable

23. Preventative Maintenance: Not Applicable

24a. Special Attributes such as Environmental Attributes (E.G., Recycled Content, Energy Efficiency, and/or Reduced Pollutants):

Not Applicable

24b. Section 508 Compliance Information:

Section 508 compliance information on the supplies and services in this contract are available in Electronic and Information Technology (EIT). The EIT standard can be found at: http:www.Section508.gov/.

25. Data Universal Number System (DUNS) Number: 067 641 597

26. Notification regarding registration in System for Award Management (SAM) database:

Contractor has a current registration in SAM.

27. 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:

GDIT will ship orders to domestic port of embarkation only which is within the Continental United States (i.e. McClellan Air Force Base, CA). Overseas will be responsible for shipment and equipment from domestic port of embarkation.

Upon request of the Contractor, the ordering activity may provide the Contractor with logistics support, as available, in accordance with all applicable Government 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.

OCONUS Labor: GDIT's rates are for CONUS efforts only. For OCONUS efforts GDIT will increase the labor rates by the applicable U.S. State Department published differentials. Other related international expenses required to support employees outside of the continental United States may be charged as ODCs (including but not limited to, special space costs, taxes, Defense Base Act (DBA) Workers' Compensation insurance, travel accident insurance, and possible telecommunications costs) in our task order proposals.

SOFTWARE MAINTENANCE SERVICES (SIN 54151– ENOSIS)

Software maintenance as a product includes the publishing of bug/defect fixes via patches and updates/upgrades in function and technology to maintain the operability and usability of the software product. It may also include other no charge support that are included in the purchase price of the product in the commercial marketplace. No charge support includes items such as user blogs, discussion forums, on-line help libraries and FAQs (Frequently Asked Questions), hosted chat rooms, and limited telephone, email and/or web-based general technical support for user's self diagnostics.

GDIT
GS-35F-080CA

ENOSIS Software Maintenance

SIN	MFR PART NO	PRODUCT NAME	PRODUCT DESCRIPTION	UOI	WARRANTY	COO	GSA Price
54151	VNGT602-A	ENOSIS	M Adapter	EA	Standard	USA	$410.58
54151	VNGT602-B	ENOSIS	Connection Manager	EA	Standard	USA	$821.16
54151	VNGT602-C	ENOSIS	DataBlade Component	EA	Standard	USA	$821.16
54151	VNGT602-D	ENOSIS	Connection DLL	EA	Standard	USA	$821.16
54151	VNGT602-E	ENOSIS	JAVA Wrapper Server	EA	Standard	USA	$821.16
54151	VNGT602-F	ENOSIS	JAVA Wrapper Client	EA	Standard	USA	$821.16
54151	VNGT602-G	ENOSIS	MQSeries Interface Component	EA	Standard	USA	$821.16
54151	VNGT602-H	ENOSIS	C Adapter	EA	Standard	USA	$821.16
54151	VNGT602-I	ENOSIS	Active X Component	EA	Standard	USA	$821.16
54151	VNGT602-J	ENOSIS	Visual Basic Component	EA	Standard	USA	$821.16
54151	VNGT602-K	ENOSIS	Sybase SDS Component	EA	Standard	USA	$821.16

Cloud and Cloud-Related IT Professional Services

Infrastructure as a Service (IaaS) - GDIT Cloud

General Dynamics Information Technology (GDIT) designs, builds and manages an enterprise-level, FedRAMP-Authorized cloud (GDIT Cloud) to support projects of all sizes and complexities. GDIT Cloud provides security, visibility and enhanced performance through proactive monitoring, alerting and maintenance without service interruption.

Cloud offerings are not commodities, and purchasing cloud infrastructure and services is based on selecting the most cost-effective, functional and low-risk environment to meet individual business needs and requirements. GDIT provides a cloud solution that guarantees security, performance and compliance as well as transparent cloud operation and managed service pricing.

GDIT Cloud was specifically developed to support Government requirements and provide a solution that can address almost any solution that exists within an existing Government datacenter. The key fundamental difference between our cloud services and those of other commercial providers is that our services were built from the ground up to support Government customers. Every element of the infrastructure, process and people supporting the service takes a government centric approach to make cloud adaption easier and less complex. This approach has resulted in a flexible cloud service that can support our customer's most unique requirements that commercial cloud can't. In addition, as the commercial cloud offerings have adapted to meet governments compliance our services have also become complementary allowing our customers to adopt these commercial services in a more efficient manner by allowing the use of our cloud shared services platform to round out missing but critical services that the commercial cloud providers lack.

GDIT Cloud Features

Open platform with integration abilities
Geographically-separated data centers
Equivalent and redundant services
Private, hybrid and public options
No cross-pollination or data leakage
Managed services included

GDIT Cloud Benefits

Complete solution and managed services
Transparent pricing and operating costs
Guaranteed performance and service quality
Flexible deployment model and easy transition to private cloud
Migrate data to cloud and co-locate legacy infrastructure in data center
FedRAMP compliant and authorized

The GDIT Cloud management platform allows customers the capability to host customer-specific applications and deploy IaaS, PaaS and SaaS solutions. The portals within Cloud are as follows:

- **Business Portal:** This Portal authorizes the customer to use the GDIT Cloud based on customer needs. The customer is on-boarded through this portal using a provisioning form. The requirements for network, security, monitoring, and the environment is captured using this portal. Once the environment is setup, the Engineering Project Manager (EPM) provides the customer with the necessary credentials and token to access the Customer Portal.
- **Customer Portal:** The customer enters the portal using the credentials and tokens provided by the EPM. The portal uses multi-factor authentication and connects to the GDIT Cloud Automation Center. Once the user is authenticated, they are able to view the services listed based on the GDIT Cloud Catalog. The customers can then self-service provision a VM, create storage, increase/decrease space, RAM, etc.

SIN 518210C-Cloud Computing Services IaaS (Infrastructure as a Service) Pricing

SIN	MANUFACTURER NAME	MFR PART NO	DEALER PART NUMBER (if applicable)	UNIVERSAL PRODUCT CODE TYPE A (UPC-A)	PRODUCT NAME	PRODUCT DESCRIPTION	UOI	GSA Pricing
518210C	GDIT	CWL01	N/A	N/A	Virtual Machine - Low Bundle	Virtual Machine - Windows/Linux Low bundle 1vCPU x 2GB RAM + 80GB Storage	EA	$652.90
518210C	GDIT	CWL02	N/A	N/A	Virtual Machine - Medium Bundle	Virtual Machine - Windows/Linux Medium bundle 1vCPU x 4GB RAM + 80GB Storage	EA	$688.16
518210C	GDIT	CWL03	N/A	N/A	Virtual Machine - High Bundle	Virtual Machine - Windows/Linux High bundle 1vCPU x 8GB RAM + 160GB Storage	EA	$754.66
518210C	GDIT	CC101	N/A	N/A	Additional Computer Power	CPU Add-on (1 vCPU)	EA	$35.26
518210C	GDIT	CC102	N/A	N/A	Additional Computer Power	RAM Add-on (2GB increments)	EA	$35.26
518210C	GDIT	CMG001	N/A	N/A	Managed Customer Furnished Equipment	Rack Space, Power, connectivity w/Premium support	EA	$474.56
518210C	GDIT	CD001	N/A	N/A	1vCPU x 2GB RAM + 80GB Storage	DR Virtual Server - Cold (LOW)	EA	$163.22
518210C	GDIT	CD002	N/A	N/A	1vCPU x 4GB RAM + 80GB Storage	DR Virtual Server - Cold (MED)	EA	$172.29
518210C	GDIT	CD003	N/A	N/A	1vCPU x 8GB RAM + 160GB Storage	DR Virtual Server - Cold (HIGH)	EA	$189.42
518210C	GDIT	NN001	N/A	N/A	Network Connectivity	General Internet	EA	$475.57

Earth Observation Solutions

Provides geospatial earth observation technologies and services to include, but not limited to analysis of ground, satellite and aerial based sensor data and imagery; worldwide digital transmission, internet, data, and video services and products through various networks, platforms, and applications. Offerings include global coverage, analyzed imagery, archive storage and distribution, monitoring, basemaps (mosaics), and earth observation solutions for accurate, mission critical information for uses to include, but not limited to, environmental, agriculture, meteorology, forestry, fish & wildlife habitats, disaster response and recovery, defense, maritime, mapping, humanitarian support, transportation, and public safety. Provides solutions based on commercially available dedicated, shared, or on-demand satellite resources and associated terrestrial components and/or airborne constellation/platforms including Unmanned Aerial Systems (UAS). This includes, but not limited to, ground, satellite-based or airborne communications, sensor data, imagery and geospatial collected or derived services and/or products. Sensor data analyzed

includes electro-optical; synthetic aperture radar; Hyperspectral; LiDAR, geomagnetic field; gravity field, thermal, sonar, and all other current and emerging technologies. Includes remote sensing, software data management and analysis, and cloud applications. The full range of end-to-end data services are in the scope of this SIN to include, but not limited to, advanced data analytics, change detection, alert notification, machine learning, and emerging technologies and solutions.

SIN 541370GEO – Earth Observation Solutions Labor Category Requirements and Descriptions

LABOR CATEGORIES, EDUCATION AND YEARS OF EXPERIENCE

No.	Labor Categories	Education	Years Experience
ANT-023-EOS	JR Systems Engineer	BA/BS	*
ANT-024-EOS	Systems Engineer	BA/BS	3
ANT-026-EOS	SR Systems Engineer	BA/BS	8
ANT-027-EOS	Principal Systems Engineer	BA/BS	10
ANT-028-EOS	SR Principal Systems Engineer	MA/MS	15
ANT-038-EOS	Computer Security Specialist	BA/BS	7
ANT-039-EOS	SR Computer Security Systems Specialist	BA/BS	10
ANT-079-EOS	Network Engineer	BA/BS	2
ANT-081-EOS	SR Network Engineer	MA/MS	8
ANT-082-EOS	Principal Network Engineer	MA/MS	10
ANT-083-EOS	Network Administrator	BA/BS	7
ANT-084-EOS	SR Network Administrator	BA/BS	8
ANT-158- EOS	Imagery Analyst	BA/BS	2
ANT-159-EOS	Imagery Sr. Analyst	BA/BS	5
ANT-160-EOS	Imagery Principal Analyst	BA/BS	8
ANT-161-EOS	Imagery Sr. Principal Analyst	MA/MS	20
ANT-162-EOS	Geospatial Analyst	BA/BS	2
ANT-163-EOS	Geospatial Sr. Analyst	BA/BS	5
ANT-164-EOS	Principal Geospatial Analyst	BA/BS	8
ANT-165-EOS	Geospatial Sr. Principal Analyst	MA/MS	20

* See Labor Category Descriptions for Specialized Training and Minimum Qualifications

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

Education/Experience Substitutions

The following presents the allowable substitutions based on education and experience:

Four (4) years' experience (in addition to minimum experience requirements) may be substituted for a Bachelor's degree.

Two (2) years' experience (in addition to minimum experience requirements and Bachelor's degree) may be substituted for a Master's degree.

Two (2) years' experience (in addition to minimum requirements and Master's degree) may be substituted for a Ph.D.

For categories where a Bachelor's degree is required, a Master's degree may be substituted for two (2) years' experience; or a doctoral degree may be substituted for three (3) years' experience.

Successful completion of each course in specialized or emerging technology (Windows 2000/XP, Oracle, Powerbuilder, Web development, internet/intranet security, and XML, etc.) may be substituted for one year of experience.

For the categories of JR Network Engineer, Network Engineer, Staff Network Engineer, and Communications Network Manager, a Certificate in a related technology (certified Network Engineer, for example) may be substituted for the degree requirement.

SIN 541370GEO - LABOR CATEGORY DESCRIPTIONS

ANT-023-EOS JR Systems Engineer

Minimum/General Experience: Requires no experience but requires knowledge of the principles, methods, and techniques used in the engineering, development, maintenance, and application of multiple operating systems; knowledge of or certification in one or more specific applications or processes may be required, depending on job assignment; must have the ability to write, maintain, and modify technical documentation/specifications.

Functional Responsibility**:** Assists in the design, development, analysis, installation, maintenance, operation and servicing of computer operating/hardware systems within the GEOINT environment; provides customer support; works under direct supervision; does related work as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	4 years
AA/AS	2 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-024-EOS Systems Engineer

Minimum/General Experience: Must have three years' experience of which at least one year must be specialized. Specialized experience includes: analytically solving workflows, organization, and/or planning problems. General experience includes increasing responsibilities in systems engineering.

Functional Responsibility: Designs software tools and subsystems to support software reuse and domain analysis within the GEOINT environment. Interprets software requirements and design specifications to code, and integrates and tests software components.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	7 years
AA/AS	5 years
MA/MS	1 years
Doctorate Degree/Ph.D.	0 years

ANT-026-EOS SR Systems Engineer

Minimum/General Experience: Must have eight years directly related experience in all phases of systems engineering. Also requires advanced knowledge of the principles, methods, and techniques used in all phases of the engineering, application, and development of multiple operating systems; knowledge of or certification in specific applications or processes may be required, depending on job assignment.

Functional Responsibility: Participates in all phases of computer operating/hardware systems engineering within the GEOINT environment, including design, analysis, and modeling at a highly technical level; analyzes complex computer software/hardware requirements to provide integration and implementation support; performs operating/hardware systems engineering, including full life cycle design and development; analyzes and documents users' functional and data requirements; develops site survey instruments to gather detailed user requirements and business process analysis data; conducts functional user interviews to document functional, system, customization, and data requirements and data sources; formulates system concepts and architecture, specifies requirements, and develops implementation approaches; determines data requirements for internal processes and external interfaces; develops new systems or tailors commercial products to meet user requirements; directs and coordinates all activities necessary to complete a major engineering project or several small projects to specification and on schedule; may serve as task or project lead, exercising leadership in either a technical role training other hardware engineers and implementing and enforcing established standards and technologies, or in a project coordination role leading tasks and assuming responsibility for the design, development, test and delivery of a software system or application

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-027-EOS Principal Systems Engineer

Minimum/General Experience: Must have ten years directly related experience in all phases of systems engineering. Requires advanced knowledge of the principles, methods, and techniques used in all phases of the engineering, application, and development of multiple operating systems; knowledge of or certification in specific applications or processes may be required, depending on job assignment.

Functional Responsibility: Establishes state-of-the-art techniques within the GEOINT environment for designing, developing, modifying and troubleshooting highly complex computer operating/hardware system; may work independently on projects requiring advanced, concentrated and diversified knowledge regarding engineering principles in broad assignment areas or may serve as project lead with supervisory responsibilities. Designs operating/hardware systems; formulates system concepts and architecture, specifies requirements, and develops implementation approaches; identifies and directs resolution of complex hardware/software interface issues within the GEOINT environment; subject matter expert on emerging technologies; directs the development of systems specifications and technical documentation; may serve as project lead, either working independently in a technical role in field of specialization, or in providing work leadership with management or supervisory responsibility for the group;
Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	14 years
AA/AS	12 years
MA/MS	8 years
Doctorate Degree/Ph.D.	7 years

ANT-028 - EOS SR Principal Systems Engineer

Minimum/General Experience: Must have fifteen years directly related experience in all phases of systems engineering. Also requires advanced knowledge of the principles, methods, and techniques used in all phases of the engineering, application, and development of multiple operating systems; knowledge of or certification in specific applications or processes may be required, depending on job assignment.

Functional Responsibility: Works at the highest systems level to provide expert advice and counsel within the GEOINT environment to assigned functional/user area managers and project teams for systems of the most complex nature, often crossing functional lines. Designs major computer systems; coordinates work on subsystems; oversees the integration of new applications with established systems and files; confers with assigned systems users and evaluates utilization to identify requirements modifications which will facilitate integration, increase efficiency and/or reduce costs; investigates new procedures, equipment and operating systems to determine their usefulness and applicability to operations; assists systems management in developing systems analysis standards and provides consultative direction to applications programmers, systems software engineers, computer center operations and user personnel in the planning and scheduling of systems projects which cross functional lines or are of the most complex nature.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	21 years
AA/AS	19 years
BA/BS	17 years
Doctorate Degree/Ph.D.	14 years

ANT-038 - EOS Computer Security Specialist

Minimum/General Experience: Must have a minimum of seven years' experience, of which at least five years must be information security/Information Assurance (IA) experience. Must have experience in security administration, evaluation of security/Information Assurance product capabilities, assessment and policy development. Must have a solid understanding of federal information security/assurance policies, standards and regulations.

Functional Responsibility: Gathers and organizes technical information within the GEOINT environment about an organization's mission goals and needs, IT infrastructure and existing security/IA products. Assists in developing security/IA policies, procedures and standards. Responsibilities will include working with the customer to minimize risks and assess and secure networks.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
MA/MS	5 years
Doctorate Degree/Ph.D.	4 years

ANT-039-EOS SR Computer Security Specialist

Minimum/General Experience: Must have a minimum of ten years' experience, of which at least eight must be information security/Information Assurance (IA) experience. Must have experience in security administration, evaluation of security/Information Assurance product capabilities, assessment and policy development. Must have a solid understanding of federal information security/assurance policies, standards and regulations.

Functional Responsibility: Gathers and organizes technical information within the GEOINT environment about an organization's mission goals and needs, IT

infrastructure, and existing security/IA products. Assists in developing security/IA policies, procedures, and standards. Responsibilities will include working with the customer to minimize risks and assess and secure networks. Evaluates and recommends security products for various platforms and initiatives. May act as a project leader and provide technical leadership and guidance.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	14 years
AA/AS	12 years
MA/MS	8 years
Doctorate Degree/Ph.D.	7 years

ANT-079- EOS Network Engineer

Minimum/General Experience: Must have at least two 2 years' related network design/administration experience. Also requires knowledge of the principles, methods, and techniques used in network administration and engineering plus knowledge of and ability to use relevant hardware, software and other equipment. Certification in specific applications may be required, depending on job assignment

Functional Responsibility: Analyzes local and wide area network systems within the GEOINT environment, including planning, designing, evaluating, selecting, and upgrading operating systems and protocol suites and configuring communication media with concentrators, bridges, and other devices; resolves interoperability problems to obtain operations across all platforms including email, file transfer, multimedia, teleconferencing, and the like; configures systems to user requirements; supports the acquisition of hardware and software as well as subcontractor services as needed; performs various tests and documents results; administers and maintains local and wide area networks; provides technical support and troubleshooting to users; plans network layout design; may administer network security.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
HS/ AS + Certificate in related technology	2 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-081-EOS SR Network Engineer

Minimum/General Experience: Must have at least eight years' related network design/administration experience. Also must have advanced knowledge of the principles, methods, and techniques used in network administration and engineering plus advanced knowledge of and ability to use relevant hardware, software and other equipment is required.

Functional Responsibility: Analyzes local and wide area network systems within the GEOINT environment, including planning, designing, evaluating, selecting, and upgrading operating systems and protocol suites and configuring communication media with concentrators, bridges, and other devices; resolves interoperability problems to obtain operations across all platforms including email, file transfer, multimedia, teleconferencing, and the like; configures systems to user requirements; supports the acquisition of hardware and software as well as subcontractor services as needed; performs various tests and documents results; administers and maintains local and wide area networks; provides technical support and troubleshooting to users; plans network layout design; may administer network security; may perform database administration; may supervise and direct the work of lower level personnel; may serve as technical team or task lead.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	14 years
AA/AS	12 years
BA/BS	10 years
Doctorate Degree/Ph.D.	7 years

ANT-082 - EOS Principal Network Engineer

Minimum/General Experience: Must have at least ten years' related network design/administration experience. Expert knowledge of the principles, methods, and techniques used in network administration and engineering plus expert knowledge of and ability to use relevant hardware, software and other equipment is required.

Functional Responsibility: Provides expert level analysis of local and wide area network systems within the GEOINT environment, including planning, designing, evaluating, selecting, and upgrading operating systems and protocol suites and configuring communication media with concentrators, bridges, and other devices; resolves interoperability problems to obtain operations across all platforms including email, file transfer, multimedia, teleconferencing, and the like; configures systems to user requirements; supports the acquisition of hardware and software as well as subcontractor services as needed; directs various

testing and the documentation of results; plans network layout design; may administer network security; may perform database administration; may supervise and direct the work of lower level personnel; serves as technical team or task lead.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	16 years
AA/AS	14 years
BA/BS	12 years
Doctorate Degree/Ph.D.	9 years

ANT-083-EOS Network Administrator

Minimum/General Experience: Requires at least seven years' experience. Also requires knowledge of the principles, methods, and techniques used in network troubleshooting and support as well as knowledge of operating systems and applications and network management. Must have working knowledge of current technologies and products for Web services and security.

Functional Responsibility: Supports, installs, maintains, troubleshoots, and coordinates the usage of local and wide area networks (LAN and WAN) within the GEOINT environment, electronic mail, telecommunications, and PC based systems and related software; evaluates hardware and software, including peripheral, output, and telecommunications equipment; sets up and administers security procedures; troubleshoots problems; recommends and implements LAN policies and procedures and ensures adherence to security procedures; trains users on LAN operations and procedures.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
MA/MS	5 years
Doctorate Degree/Ph.D.	4 years

ANT-084-EOS SR Network Administrator

Minimum/General Experience: Requires eight years of experience and knowledge of the principles, methods, and techniques used in network troubleshooting and support, operating systems and applications and network management. Must have working knowledge of current technologies and products for Web services and security.

Functional Responsibility: Responsible for the planning, design, acquisition, installation, and maintenance of LAN and WAN within the GEOINT environment, electronic mail, telecommunications, and PC based systems and related software; evaluates hardware and software, including peripheral, output, and telecommunications equipment; sets up and administers security procedures; troubleshoots problems; establishes and implements LAN policies and their conformance; coordinates activities of LAN support personnel, providing guidance on common networking issues; assesses vendor products; manages network performance, troubleshoots problems, and maintains network security.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT—158-EOS Imagery Analyst

Minimum/General Experience: Requires at least 2 years of related experience supporting statistics/data analysis and programming in data analytical language. Knowledge of the principles, methods, and techniques used in statistical analysis. Knowledge of the principles, methods, and techniques used in database management. Ability to prepare and present technical research specific certifications or military education/training may be required, depending on job assignment.

Functional Responsibility: Provides analysis and research for national security, infrastructure, technology, country, geographic area, biographic and targeted vulnerability. Prepares assessments of current threats and trends based on the sophisticated collection, research and analysis of classified and open source information within Earth Observation Services. Assists with development of analytical procedures to meet changing requirements and ensure maximum operational success. Collects data using a combination of standard intelligence methods and business processes. Performs data collection, analysis, interpretation, and management duties. Prepares presentations that reflect the results of the data analysis. Works with scientists and other technical experts to design and develop statistical analyses methodologies. Maintains current knowledge of relevant technologies and subject areas. Participates in special projects as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years

MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT- 159-EOS Imagery Sr. Analyst

Minimum/General Experience: 5 years of related experience supporting statistics/data analysis and programming in data analytical language. Comprehensive knowledge of the principles, methods, and techniques used in statistical analysis. Comprehensive knowledge of the principles, methods, and techniques used in database management. Experience preparing and presenting technical research specific certifications or military education/training may be required, depending on job assignment.

Functional Responsibilities: Provides analysis and research for national security, infrastructure, technology, country, geographic area, biographic and targeted vulnerability. Prepares assessments of current threats and trends based on the sophisticated collection, research and analysis of classified and open source information. Develops and maintainsanalytical procedures to meet changing requirements and ensure maximum operational success within Earth Observation Services. Collects data using a combination of standard intelligence methods and business processes. Performs and manages data collection, analysis, interpretation, and management duties. Prepares presentations that reflect the results of the data analysis. Provides data-related training to staff. Coordinates with scientists and other technical experts to design and develop statistical analyses methodologies. May provide guidance and work leadership to less-experienced staff. Maintains current knowledge of relevant technologies and subject areas. Participates in special projects as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-160-EOS Imagery Principal Analyst

Minimum/General Experience: 8 years of related experience supporting statistics/data analysis and programming in data analytical language. Provides and manages analysis and research for national security, infrastructure, technology, country, geographic area, biographic and targeted vulnerability. Advanced knowledge of the principles, methods, and techniques used in statistical analysis. Advanced knowledge of the principles, methods, and techniques used in database management within Earth Observation Services Experience preparing and presenting technical research specific certifications or military education/training may be required, depending on job assignment.

Functional Responsibilities: Prepares and reviews assessments of current threats and trends based on the sophisticated collection, research and analysis of classified and open source information. Develops, supervises, and maintains analytical procedures to meet changing requirements and ensure maximum operational success. Oversees the collection of data using a combination of standard intelligence methods and business processes. Manages data collection, analysis, interpretation, and management duties. Delivers presentations that reflect the results of the data analysis. Develops and provides data-related training to staff. Coordinates with scientists and other technical experts to design and develop statistical analyses methodologies. Provides guidance and work leadership to less-experienced staff. Maintains current knowledge of relevant technologies and subject areas. Participates in special projects as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-161-EOS Imagery Sr. Principal Analyst

Minimum/General Experience: Minimum of 20 years of related GEOINT experience with Service or National Agency requirements. Plans and executes broad imagery exploitation requirements. Provides remotely sensed imagery analysis and research for national security, infrastructure, technology, country, geographic area, and targeted vulnerability. Understands and can exploit GEOINT data from active sensors such as synthetic aperture RADAR (SAR) and light detection and ranging (LIDAR). Masters' Degree in Geospatial Sciences, Intelligence,

Geography or the equivalent and 10 years' experience processing and exploiting remotely sensed imagery. Expert knowledge of the principles, methods, and techniques used in statistical analysis within Earth Observation Services. Advanced knowledge of the principles, methods, and techniques used in database management. Expert experience preparing and presenting technical research specific certifications or military education/training may be required, depending on job assignment.

Functional Responsibilities: Conducts Multi-INT research, populates intelligence databases, and produces written, graphic, and oral intelligence products. Prepares expert assessments of current threats and trends based on sophisticated GEOINT collection, research, and analysis of classified and unclassified imagery. Understands the DOD and Intelligence Community (IC) reporting and classification standards. Develops and maintains remotely sensed imagery analytical procedures to meet changing requirements and ensure maximum operational success. Builds expert level Advanced Geospatial Intelligence (AGI) collection requirements to answer intelligence requirements. Performs and manages data collection, analysis, interpretation, and management duties. Provides GEOINT related training to staff. Coordinates with physical and imagery scientists and other technical experts to design and develop statistical analyses. May provide guidance and work leadership to less-experienced staff. Maintains current knowledge of relevant technologies and subject areas. Participates in special projects as required.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	26 years
AA/AS	24 years
BA/BS	22 years
Doctorate Degree/Ph.D.	19 years

ANT-162-EOS Geospatial Analyst

Minimum/General Experience: At least 2 years of related experience supporting statistics/data analysis and programming in data analytical language. Knowledge of the principles, methods, and techniques used in statistical analysis within Earth Observation Services. Knowledge of the principles, methods, and techniques used in database management. Ability to prepare and present technical research. Specific certifications or military education/training may be required, depending on job assignment.

Functional Responsibilities: Provides analysis and research for national security, infrastructure, technology, country, geographic area, biographic and targeted vulnerability. Prepares assessments of current threats and trends based on the sophisticated collection, research and analysis of classified and open source information. Assists with development of analytical procedures to meet changing requirements and ensure maximum operational success. Collects data using a combination of standard intelligence methods and business processes. Collects data using a combination of standard intelligence methods and business processes. Performs data collection, analysis, interpretation, and management duties. Prepares presentations that reflect the results of the data analysis. Works with scientists and other technical experts to design and develop statistical analyses methodologies. Maintains current knowledge of relevant technologies and subject areas. Participates in special projects as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-163-EOS Geospatial Sr. Analyst

Minimum/General Experience: 5 years of related experience supporting statistics/data analysis and programming in data analytical language. Comprehensive knowledge of the principles, methods, and techniques used in statistical analysis within Earth Observation Services. Comprehensive knowledge of the principles, methods, and techniques used in database management. Experience preparing and presenting technical research. Specific certifications or military education/training may be required, depending on job assignment.

Functional Responsibilities: Provides analysis and research for national security, infrastructure, technology, country, geographic area, biographic and targeted vulnerability. Prepares assessments of current threats and trends based on the sophisticated collection, research and analysis of classified and open source information. Develops and maintains analytical procedures to meet changing requirements

and ensure maximum operational success. Collects data using a combination of standard intelligence methods and business processes. Performs and manages data collection, analysis, interpretation, and management duties. Prepares presentations that reflect the results of the data analysis. Provides data-related training to staff. Coordinates with scientists and other technical experts to design and develop statistical analyses methodologies. May provide guidance and work leadership to less-experienced staff. Maintains current knowledge of relevant technologies and subject areas. Participates in special projects as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-164-EOS Principal Geospatial Analyst

Minimum/General Experience: Requires 8 years of related experience supporting statistics/data analysis and programming in data analytical language.
Functional Responsibility: Provides analysis and manages research methods for national security, infrastructure, technology, country, geographic area, biographic and targeted vulnerability within the GEOINT environment. Prepares and reviews assessments of current threats and trends based on the sophisticated collection, research and analysis of classified and open source information. Develops and maintain rules and methodologies for analytical procedures to meet changing requirements and ensure maximum operational success. Oversees the collection of data using a combination of standard intelligence methods and business processes. Performs data collection, analysis, interpretation and management duties; delivers presentations that reflect the results of the data analysis and provides data-related training to staff. Coordinates with scientists and other technical experts to design and develop statistical analyses methodologies. Provides guidance and work leadership to less-experienced staff. Maintains current knowledge of relevant technologies and subject areas. Participates in special projects as required.
Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-165-EOS Geospatial Sr. Principal Analyst

Minimum/General Experience: Minimum of 20 years of related GEOINT experience with Service or National Agency requirements. Expert knowledge of the principles, methods, and techniques used in statistical analysis within Earth Observation Services. Expert knowledge of the principles, methods, and techniques used in database management. Experience preparing and presenting technical research. Specific certifications or military education/training may be required, depending on job assignment.

Functional Responsibilities: Provides analysis and research for national security, infrastructure, technology, country, geographic area, biographic and targeted vulnerability. Delivers assessments of current threats and trends based on the sophisticated collection, research and analysis of classified and open source information. Develops and supervises analytical procedures to meet changing requirements and ensure maximum operational success. Supervises collection of data using a combination of standard intelligence methods and business processes. Performs data collection, analysis, interpretation and management duties. Delivers presentations and maintains digital Geospatial Services that reflect the results of the data analysis. Understands the DOD and Intelligence Community (IC) reporting and classification standards. Develops and maintains remotely sensed imagery analytical procedures to meet changing requirements and ensure maximum operational success. Develops and provides data-related training to staff. Coordinates with scientists and other technical experts to design and develop statistical analyses methodologies. Provides guidance and work leadership to less-experienced staff. Maintains current knowledge of relevant technologies and subject areas of staff. Participates in special projects as required.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	26 years
AA/AS	24 years
BA/BS	22 years
Doctorate Degree/Ph.D.	19 years

Earth Observation Solutions Labor Category-Rates

Cat #	Category Name	Contract Year 5 GSA Price with IFF (11/21/18 to 11/20/19)	Contract Year 6 GSA Price with IFF (11/21/19 to 11/20/20)	Contract Year 7 GSA Price with IFF (11/21/20 to 11/20/21)	Contract Year 8 GSA Price with IFF (11/21/21 to 11/20/22)	Contract Year 9 GSA Price with IFF (11/21/22 to 11/20/23)	Contract Year 10 GSA Price with IFF (11/21/23 to 11/20/24)
ANT-023-EOS	Jr. Systems Engineer	$ 76.89	$ 78.54	$ 80.22	$ 81.93	$ 83.69	$ 85.48
ANT-024-EOS	Systems Engineer	$ 93.49	$ 95.49	$ 97.53	$ 99.62	$ 101.75	$ 103.93
ANT-026-EOS	Sr. Systems Engineer	$ 122.43	$ 125.05	$ 127.73	$ 130.46	$ 133.25	$ 136.10
ANT-027-EOS	Principal Systems Engineer	$ 128.88	$ 131.64	$ 134.46	$ 137.34	$ 140.28	$ 143.28
ANT-028-EOS	Sr. Principal Systems Engineer	$ 172.79	$ 176.49	$ 180.27	$ 184.12	$ 188.06	$ 192.09
ANT-038-EOS	Computer Security Specialist	$ 98.07	$ 100.17	$ 102.32	$ 104.51	$ 106.74	$ 109.03
ANT-039-EOS	Sr. Computer Security Specialist	$ 138.02	$ 140.97	$ 143.99	$ 147.07	$ 150.22	$ 153.43
ANT-079-EOS	Network Engineer	$ 87.04	$ 88.90	$ 90.80	$ 92.75	$ 94.73	$ 96.76
ANT-081-EOS	Sr. Network Engineer	$ 117.59	$ 120.11	$ 122.68	$ 125.30	$ 127.98	$ 130.72
ANT-082-EOS	Principal Network Engineer	$ 159.19	$ 162.59	$ 166.07	$ 169.63	$ 173.26	$ 176.97
ANT-083-EOS	Network Administrator	$ 100.43	$ 102.58	$ 104.78	$ 107.02	$ 109.31	$ 111.65
ANT-084-EOS	Sr. Network Administrator	$ 124.59	$ 127.26	$ 129.98	$ 132.76	$ 135.60	$ 138.51
ANT-158-EOS	Imagery Analyst	$ 108.96	$ 111.30	$ 113.68	$ 116.11	$ 118.59	$ 121.13
ANT-159-EOS	Imagery Sr Analyst	$ 125.30	$ 127.98	$ 130.72	$ 133.52	$ 136.37	$ 139.29
ANT-160-EOS	Imagery Principal Analyst	$ 144.54	$ 147.63	$ 150.79	$ 154.02	$ 157.31	$ 160.68
ANT-161-EOS	Imagery Sr Princ Analyst	$ 191.18	$ 195.27	$ 199.45	$ 203.72	$ 208.08	$ 212.53
ANT-162-EOS	Geospatial Analyst	$ 115.75	$ 118.23	$ 120.76	$ 123.34	$ 125.98	$ 128.68
ANT-163-EOS	Geospatial Sr Analyst	$ 133.10	$ 135.95	$ 138.86	$ 141.83	$ 144.87	$ 147.97
ANT-164-EOS	Geospatial Principal Analyst	$ 149.13	$ 152.32	$ 155.58	$ 158.91	$ 162.31	$ 165.79
ANT-165-EOS	Geospatial Sr Princ Analyst	$ 191.18	$ 195.27	$ 199.45	$ 203.72	$ 208.08	$ 212.53

Rates are escalated 2.14% annually

Highly Adaptive Cybersecurity Services

The Highly Adaptive Cybersecurity Services (HACS) offered through General Dynamics Information Technology, Inc. (GDIT) cover the following areas: Highly Value Asset Assessments, Penetration Testing, Incident Response, Cyber Hunt and Risk and Vulnerability Assessments.

High Value Asset (HVA) Assessments include Risk and Vulnerability Assessment (RVA) which assesses threats and vulnerabilities, determines deviations from acceptable configurations, enterprise or local policy, assesses the level of risk, and develops and/or recommends appropriate mitigation countermeasures in operational and non-operational situations. The services offered in the RVA sub-category include Network Mapping, Vulnerability Scanning, Phishing Assessment, Wireless Assessment, Web Application Assessment, Operating System Security Assessment (OSSA), Database Assessment, and Penetration Testing. Security Architecture Review (SAR) evaluates a subset of the agency's HVA security posture to determine whether the agency has properly architected its cybersecurity solutions and ensures that agency leadership fully understands the risks inherent in the implemented cybersecurity solution. The SAR process utilizes in-person interviews, documentation reviews, and leading practice evaluations of the HVA environment and supporting systems. SAR provides a holistic analysis of how an HVA s individual security components integrate and operate, including how data is protected during operations. Systems Security Engineering (SSE) identifies security vulnerabilities and minimizes or contains risks associated with these vulnerabilities spanning the Systems Development Life Cycle. SSE focuses on, but is not limited to the following security areas: perimeter security, network security, endpoint security, application security, physical security, and data security.

Penetration Testing – Penetration testing is security testing in which assessors mimic real-world attacks to identify methods for circumventing the security features of an application, system or network.

Incident Response – Incident response services help organizations impacted by a Cybersecurity compromise determine the extent of the incident, remove the adversary from their systems, and restore their networks to a more secure state.

Cyber Hunt – Cyber hunt activities are responses to crises or urgent situations within the pertinent domain to mitigate immediate and potential threats. Cyber Hunts start with the premise that threat actors known to target some organizations in a specific industry or with specific systems are likely to also target other organizations in the same industry or with the same systems.

Risk and Vulnerability Assessments (RVA) – Risk and vulnerability assessments assesses threats and vulnerabilities, determines deviations from acceptable configurations, enterprise or local policy, assesses the level of risk, and develops and/or recommends appropriate mitigation countermeasures in operational and non-operational situations. The services offered in the RVA sub-category include Network Mapping, Vulnerability Scanning, Phishing Assessment, Wireless Assessment, Web Application Assessment, Operating System Security Assessment (OSSA), Database Assessment, and Penetration Testing.

SIN 54151HACS – Highly Adaptive Cybersecurity Services (HACS) Labor Category Requirements and Descriptions

LABOR CATEGORIES, EDUCATION AND YEARS OF EXPERIENCE

No.	Labor Categories	Education	Years Experience
ANT-001HAC	Technical Expert Level 5	BA/BS	6
ANT-002HAC	Technical Expert Level 4	BA/BS	8
ANT-003HAC	Technical Expert Level 3	MA/MS	10
ANT-004HAC	Technical Expert Level 2	MA/MS	12
ANT-005HAC	Technical Expert Level 1	PhD	15
ANT-006HAC	Project Manager/Task Lead	BA/BS	7
ANT-007HAC	Program Manager	BA/BS	10
ANT-008HAC	Sr. Program Manager	BA/BS	12
ANT-009HAC	Proprietary Product Application Developer	*	*
ANT-010HAC	Proprietary Product Application Designer	*	*
ANT-011HAC	Proprietary Product Database Administrator	*	*
ANT-012HAC	Proprietary Product System Architect	*	*
ANT-013HAC	Business Process Reengineering Analyst	*	*
ANT-015HAC	Scientist	BA/BS	2
ANT-016HAC	Staff Scientist	BA/BS	5
ANT-017HAC	SR Scientist	MA/MS	8
ANT-018HAC	Principal Scientist	MA/MS	10
ANT-019HAC	SR Principal Scientist	PhD	15
ANT-023HAC	JR Systems Engineer	BA/BS	*
ANT-024HAC	Systems Engineer	BA/BS	3
ANT-025HAC	Staff Systems Engineer	BA/BS	6
ANT-026HAC	SR Systems Engineer	BA/BS	8
ANT-027HAC	Principal Systems Engineer	BA/BS	10
ANT-028HAC	SR Principal Systems Engineer	MA/MS	15
ANT-029HAC	Information Engineer	BA/BS	5
ANT-030HAC	SR Information Engineer	BA/BS	8
ANT-031HAC	Principal Information Engineer	BA/BS	10
ANT-032HAC	JR Software Engineer	BA/BS	*
ANT-033HAC	Software Engineer	BA/BS	2
ANT-034HAC	Staff Software Engineer	BA/BS	3
ANT-035HAC	SR Software Engineer	BA/BS	5
ANT-036HAC	Principal Software Engineer	MA/MS	8
ANT-037HAC	Software Architect	MA/MS	10
ANT-038HAC	Computer Security Specialist	BA/BS	7

No.	Labor Categories	Education	Years Experience
ANT-039HAC	SR Computer Security Systems Specialist	BA/BS	10
ANT-040HAC	JR Database Architect	BA/BS	2
ANT-041HAC	Database Architect	BA/BS	3
ANT-042HAC	SR Database Architect	BA/BS	5
ANT-045HAC	Computer Programmer/Analyst	BA/BS	3
ANT-046HAC	Staff Computer Programmer/Analyst	BA/BS	4
ANT-047HAC	SR Computer Programmer/Analyst	BA/BS	5
ANT-048HAC	Principal Computer Programmer/Analyst	BA/BS	8
ANT-049HAC	Computer Systems Programmer	BA/BS	5
ANT-050HAC	Web Designer	BA/BS	2
ANT-051HAC	Web Developer	BA/BS	4
ANT-052HAC	SR Web Developer	BA/BS	8
ANT-053HAC	Web Tech Administrator	BA/BS	4
ANT-054HAC	Web Content Manager	BA/BS	2
ANT-055HAC	Web Security Administrator	BA/BS	4
ANT-057HAC	Computer Systems Analyst	BA/BS	3
ANT-058HAC	Staff Computer Systems Analyst	BA/BS	5
ANT-059HAC	SR Computer Systems Analyst	BA/BS	8
ANT-060HAC	Principal Computer Systems Analyst	BA/BS	10
ANT-061HAC	Legacy System Analyst	*	*
ANT-062HAC	JR Functional Analyst/Specialist	BA/BS	1
ANT-063HAC	Functional Analyst/Specialist	BA/BS	5
ANT-064HAC	SR Functional Analyst/Specialist	BA/BS	7
ANT-065HAC	Principal Functional Analyst/Specialist	MA/MS	8
ANT-066HAC	SR Principal Functional Analyst/Specialist	MA/MS	10
ANT-067HAC	Data Management Specialist	BA/BS	6
ANT-068HAC	Data Administrator	BA/BS	6
ANT-069HAC	Data Manager	BA/BS	7
ANT-070HAC	Computer Operations Manager	AA/AS	6
ANT-071HAC	SR Computer Operations Manager	BA/BS	6
ANT-076HAC	Communications Engineer	BA/BS	6
ANT-077HAC	SR Communications Engineer	BA/BS	10
ANT-078HAC	JR Network Engineer	BA/BS	*
ANT-079HAC	Network Engineer	BA/BS	2
ANT-080HAC	Staff Network Engineer	BA/BS	5
ANT-081HAC	SR Network Engineer	MA/MS	8
ANT-082HAC	Principal Network Engineer	MA/MS	10
ANT-083HAC	Network Administrator	BA/BS	7
ANT-084HAC	SR Network Administrator	BA/BS	8
ANT-088HAC	Network/Computer Support Specialist	BA/BS	3
ANT-089HAC	Computer System/Network Integration Engineer	*	*
ANT-092HAC	SR Telecommunications Analyst	AA/AS	3
ANT-093HAC	Communications Network Manager	BA/BS	6
ANT-102HAC	Hardware Specialist	BA/BS	5
ANT-103HAC	Quality Assurance/IV&V Analyst	BA/BS	2
ANT-104HAC	Quality Assurance/IV&V Specialist	BA/BS	4
ANT-105HAC	Quality Assurance/IV&V Manager	BA/BS	7
ANT-108HAC	Configuration Management Specialist	BA/BS	5
ANT-109HAC	SR Configuration Management Specialist	BA/BS	7
ANT-111HAC	Training Specialist/Instructor	BA/BS	4
ANT-112HAC	SR Training Specialist/Instructor	BA/BS	6
ANT-114HAC	Training Specialist	AA/AS	3
ANT-115HAC	SR Training Specialist	AA/AS	7
ANT-116HAC	Principal Training Specialist	AA/AS	10
ANT-119HAC	Testing and Validation Specialist	BA/BS	*
ANT-121HAC	Principal Testing and Validation Specialist	MA/MS	5
ANT-123HAC	Instructional System Designer	BA/BS	2

No.	Labor Categories	Education	Years Experience
ANT-124HAC	SR Instructional System Designer	MA/MS	5
ANT-128HAC	Staff Graphics Design Specialist	AA/AS	5
ANT-129HAC	SR Graphics Design Specialist	AA/AS	8
ANT-130HAC	Principal Graphics Design Specialist	AA/AS	9
ANT-133HAC	Contract Administrator	BA/BS	2
ANT-134HAC	SR Contract Administrator	BA/BS	5
ANT-137HAC	Program Management Specialist	BA/BS	3
ANT-138HAC	SR Program Management Specialist	BA/BS	6
ANT-139HAC	Principal Program Management Specialist	BA/BS	8
ANT-148HAC	SR Documentation Specialist	AA/AS	8
ANT-150HAC	Technical Editor	BA/BS	5

* See Labor Category Descriptions for Specialized Training and Minimum Qualifications

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

Education/Experience Substitutions

The following presents the allowable substitutions based on education and experience:

Four (4) years' experience (in addition to minimum experience requirements) may be substituted for a Bachelor's degree.

Two (2) years' experience (in addition to minimum experience requirements and Bachelor's degree) may be substituted for a Master's degree.

Two (2) years' experience (in addition to minimum requirements and Master's degree) may be substituted for a Ph.D.

For categories where a Bachelor's degree is required, a Master's degree may be substituted for two (2) years' experience; or a doctoral degree may be substituted for three (3) years' experience.

Successful completion of each course in specialized or emerging technology (Windows 2000/XP, Oracle, Powerbuilder, Web development, internet/intranet security, and XML, etc.) may be substituted for one year of experience.

For the categories of JR Network Engineer, Network Engineer, Staff Network Engineer, and Communications Network Manager, a Certificate in a related technology (certified Network Engineer, for example) may be substituted for the degree requirement.

SIN 54151HACS - LABOR CATEGORY DESCRIPTIONS

ANT-001HAC Technical Expert Level 5

Minimum/General Experience: Experience qualifications will be determined on a case-by-case basis. Generally, this requires six years of general experience in Security information systems, including four years of specialized experience providing state-of-the art solutions in Security information systems technology **and of which 2 years must be cybersecurity** (or, if the particular area of expertise is new state-of-the-art technology, the specialized experience may be less than four years and more consistent with the age of the technology). Performs highly specialized and technical tasks associated with the most current and cutting-edge Security information technologies. May serve as a technical consultant to a project or a number of projects dealing with area of technical expertise. Generally recognized as a leader in the industry in their area of expertise, sought out by others in their area of expertise for advice and guidance.

Functional Responsibility: Provide expert, independent services and leadership in specialized cybersecurity technical areas. Provides expertise on an as-needed basis to all task assignments. Provides expert advice and assistance in state-of-the-art software/hardware. Coordinates with contractor management and Government personnel to ensure that the problem has been properly defined and that the solution will satisfy the Government's requirement.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	10 years
AA/AS	8 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-002HAC Technical Expert Level 4

Minimum/General Experience: Experience qualifications will be determined on a case-by-case basis. Generally this requires eight years of general experience in Security information systems, including six years of specialized experience providing state-of-the-art solutions in Security information systems technology **and of which 2 years must be cybersecurity** (or, if the particular area of expertise is new state-of-the-art technology, the specialized experience may be less than six years and more consistent with the age of the technology). Recognized expert in the technology being addressed.

Functional Responsibility: Provide expert, independent services and leadership in specialized technical areas. Provides expertise on an as-needed basis to all task assignments. Provides expert advice and assistance in state-of-the-art software/hardware. Coordinates with contractor management and Government personnel to ensure that the problem has been properly defined and that the solution will satisfy the Government's requirement.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-003HAC Technical Expert Level 3

Minimum/General Experience: Experience qualifications will be determined on a case-by-case basis. Generally this requires ten years of general experience in Security information systems, including eight years of specialized experience providing state-of-the-art solutions in Security information systems technology **and of which at least 2 years must be cybersecurity** (or, if the particular area of expertise is new state-of-the-art technology, the specialized experience may be less than eight years and more consistent with the age of the technology). Recognized expert in the technology being addressed.

Functional Responsibility: Provide expert, independent services and leadership in specialized cybersecurity technical areas. Provides expertise on an as-needed basis to all task assignments. Provides expert advice and assistance in state-of-the-art software/hardware. Coordinates with contractor management and Government personnel to ensure that the problem has been properly defined and that the solution will satisfy the Government's requirement.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	16 years
AA/AS	14 years
BA/BS	12 years
Doctorate Degree/Ph.D.	9 years

ANT-004HAC Technical Expert Level 2

Minimum/General Experience: Experience qualifications will be determined on a case-by-case basis. Generally this requires twelve years of general experience in Security information systems, including ten years of specialized experience providing state-of-the-art solutions in Security information systems technology **and of which at least 2 years must be cybersecurity** (or, if the particular area of expertise is new state-of-the-art technology, the specialized experience may be less than

ten years and more consistent with the age of the technology.

Functional Responsibility: Provide expert, independent services and leadership in specialized cybersecurity technical areas. Provides expertise on an as-needed basis to all task assignments. Provides expert advice and assistance in state-of-the-art software/hardware. Coordinates with contractor management and Government personnel to ensure that the problem has been properly defined and that the solution will satisfy the Government's requirement.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	18 years
AA/AS	16 years
BA/BS	14 years
Doctorate Degree/Ph.D.	11 years

ANT-005HAC Technical Expert Level 1

Minimum/General Experience: Experience qualifications will be determined on a case-by-case basis. Generally this requires fifteen years of general experience in Security information systems, including ten years of specialized experience providing state-of-the-art solutions in Security information systems technology **and of which at least 2 years must be cybersecurity** (or, if the particular area of expertise in new state-of-the-art technology, the specialized experience may be less than ten years and more consistent with the age of the technology). Recognized expert in the technology being addressed.

Functional Responsibility: Provide expert, independent services and leadership in specialized cybersecurity technical areas. Provides expertise on an as-needed basis to all task assignments. Provides expert advice and assistance in state-of-the-art software/hardware. Coordinates with contractor management and Government personnel to ensure that the problem has been properly defined and that the solution will satisfy the Government's requirement.

Minimum Education: Doctorate Degree/Ph.D.

Approved Substitutions	
Education	**Experience**
HS	22 years
AA/AS	20 years
BA/BS	18 years
MA/MS	16 years
Doctorate Degree/Ph.D.	15 years

ANT-006HAC Project Manager/Task Lead

Minimum/General Experience: Must have seven years of general experience including five years of specialized Cybersecurity or Security IT and of which two years were direct supervisory experience.

Functional Responsibility: Monitors each task, and keeps the Program Manager abreast of all problems and accomplishments. Anticipates problems, and works to mitigate the anticipated problems. As a team or project leader, provides technical direction for the complete systems development effort. May serve as a technical authority for a design area. As a cybersecurity specialist or consultant, resolves unique and unyielding systems problems using new technology. Can complete tasks within estimated time frames and budget constraints. Schedules and assigns duties to subordinates. Interacts with government management personnel. Reports in writing and orally to contractor management and government representatives, including the government contracting officer.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
MA/MS	5 years
Doctorate Degree/Ph.D.	4 years

ANT-007HAC Program Manager

Minimum/General Experience: Must have at least ten years' experience, of which at least six years must be specialized in Cybersecurity or Security IT. Specialized experience includes: complete engineering project development from inception to deployment, demonstrated ability to provide guidance and direction in the tasks similar to the sample tasks provided in the statement of work, proven expertise in the management and control of funds and resources, demonstrated capability in managing multi-task contracts of this type and complexity. General experience includes increasing responsibilities in information systems design and management.

Functional Responsibility: Serves as the contractor's contract manager, and shall be the contractor's authorized interface with the Government Contracting Officer (CO), the Contracting Officer's Representative (COR), government management personnel and customer agency representatives. Responsible for formulating and enforcing work standards, assigning contractor schedules, reviewing work discrepancies, supervising contractor personnel and communicating policies, purposes, and goals of the organization to subordinates within a cybersecurity environment. Shall be responsible for the overall contract performance. Ability to manage and ensure the successful completion multiple technical tasks in assigned program(s)

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	14 years
AA/AS	12 years
MA/MS	8 years
Doctorate Degree/Ph.D.	7 years

ANT-008HAC Sr. Program Manager

Minimum/General Experience: Must have twelve years' experience, of which at least five years must be supervisory experience in the Cybersecurity or Security IT arena. Must have the ability to manage and ensure the successful completion of multiple technical tasks in assigned program(s). Must have the ability to recruit, hire, manage, supervise, train, schedule, coordinate, and evaluate staff as assigned.

Functional Responsibility: Responsible for managing very complex and/or high risk cybersecurity programs. Directs daily staff and task activities to meet client and corporate work objectives. Supervises assigned technical and administrative staff, including subordinate managers. Assures quality of task products, services, and deliverables, including participating in reviews, audits, and site visits. Serves as a liaison with clients to coordinate activities, negotiate tasks, and solve problems. Responsible for coordinating and monitoring subcontractor activities.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	16 years
AA/AS	14 years
MA/MS	10 years
Doctorate Degree/Ph.D.	9 years

ANT-009HAC Proprietary Product Application Developer

Minimum/General Experience: Completed three proprietary product courses such as Oracle 9i Forms, Oracle 9iAS Release 2PL/SQL, and Oracle 9i J2EE, and at least one year experience performing application development or; received a certification level with the proprietary product (such as Lotus Notes) and at least one year of experience performing applications development, in a broad based ADP setting. One year development experience using high technology and/or emerging technology proprietary software including but not limited to Oracle Application Development Products, Powerbuilder, Lotus Notes, Windows NT, JAVA, Visual C++, Netscape, and other Internet developer and applicator tools. Must have excellent communication skills both written and oral.

Functional Responsibility: Participates in the development of modernized software applications within the cybersecurity environment using high technology and/or emerging technology proprietary software.

ANT-010HAC Proprietary Product Application Designer

Minimum/General Experience: Completed four proprietary product courses such as Data Modeling and Relational Database Design, Oracle IDS Designer, Managing Development Using Oracle Repository, and Oracle 9iAS: Develop Web Based Applications with PL/SQL, Introduction to Design Proprietary Product (such as Oracle SQL, Powerbuilder, Windows NT) and at least one year of experience performing analysis, design and development, or; received a certification level with the proprietary product (such as Lotus Notes) and at least one year of experience performing analysis, design and development or four years of intensive and progressive experience performing analysis, design and development on contemporary hardware using contemporary languages, two years of experience performing design and development using high technology and/or emerging technology CASE technology such as Oracle CASE products, Rational Rose, or UML. Must have excellent communication skills both written and oral.

Functional Responsibility: Performs high-level analysis and design tasks associated with the overall design of application systems using one or more high technology or emerging technology proprietary product tools within the cybersecurity environment. Directs emerging technology software development programs to include system and subsystem design and implementation. Works directly with the customer to define requirements.

ANT-011HAC Proprietary Product Database Administrator

Minimum/General Experience: Completed 3 proprietary product courses such as Oracle 9i DBA Fundamentals II, Oracle 9i Database Performance Tuning, Enterprise DBA Part 1A: Architecture and Administration, and at least two years experience in all phases of system analysis, data base administration, or five years of intensive and progressive experience in all phases of systems analysis, design and development. Three years experience as a database administrator for proprietary product RDBMS, such as ORACLE. Must have experience as Database Administrator with the latest commonly used version of the relevant RDBMS.

Functional Responsibility: Creates and manages the database within a cybersecurity environment. Performs exceptionally complex database administration functions which include, but is not limited to, managing/maintaining distributed relational databases residing in a central system. Provides 24 x 7 support for production issues.

ANT-012HAC Proprietary Product System Architect

Minimum/General Experience: Completed 4 proprietary product courses such as SQL and PL/SQL. Data Modeling and Relational Database Design, Oracle 9i Forms, Oracle 9iAS: Develop Web Based Applications with PL/SQL, and at least one year of experience in application design and development, or; completed three proprietary product courses and at least two years of experience in application design and development, or; six years experience in performing application development in a broad based ADP setting including two years of extensive experience in proprietary product architect tools such as Oracle Design/2000. Must have experience in the latest commonly used version of proprietary product such as Oracle RDBMS version 8.x or 9.x. Must have excellent communication skills both written and oral.

Functional Responsibility: Participates in all phases of system design and development of complex applications generally in a client/server environment using a variety of proprietary product or emerging technology tools in a variety of cybersecurity operating environments. Works closely with the customer to validate system design and architecture.

ANT-013HAC Business Process Reengineering Analyst

Minimum/General Experience: Completed a minimum of 3 courses in Information Engineering & Business Process Reengineering Methodologies such as Activity Based Costing, IDEF Modeling, Facilitation, and two years' experience performing analysis projects, or; five years' experience, of which at least two years must be specialized in the implementation of information engineering projects using IE tools and methods. Two years business/functional experience is desirable, to support the business modeling.

Functional Responsibility: Applies business process improvement practices to reengineer methodologies/principles and business process modernization projects within a cybersecurity environment. Applies, as appropriate, activity and data modeling, transaction flow analysis, internal control and risk analysis and modern business methods and performance measurement techniques.

ANT-015HAC Scientist

Minimum/General Experience: Requires at least two years' experience within Security IT arena. Also requires knowledge of the principles, methods, and techniques used in scientific functional area(s) and knowledge of the associated equipment and systems used in assigned scientific functional area(s).

Functional Responsibility: Initiates and executes scientific research and/or development studies within a cybersecurity environment; analyzes problems and develops experimental or theoretical techniques for formalized engineering or scientific studies; resolves a variety of technical problems leading to advanced engineering studies designed to increase efficiency or reduce costs; plans and executes laboratory research; analyzes and organizes technical data and reports into summaries for management or customer review; demonstrates creative ability through patent disclosures or published papers; prepares technical manuals, reports and procedures reflecting advanced knowledge in assigned area of expertise; defines and describes laboratory tests to be performed; participates in test programs and prepares reports of test results; participates in special projects as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-016HAC Staff Scientist

Minimum/General Experience: Requires at least five years' experience within Security IT arena. Also requires knowledge of the principles, methods, and techniques used in scientific functional area(s) and knowledge of the associated equipment and systems used in scientific functional area(s).

Functional Responsibility: Initiates and executes scientific research and/or development studies within a cybersecurity environment; analyzes problems and develops experimental or theoretical techniques for formalized engineering or scientific studies; carries out development and testing of programs on systems, components and materials concurrent with design, fabrication or testing to better evaluate and minimize future problems; plans and executes laboratory research; develops alternative solutions to existing problems; uses specialized techniques and ingenuity to select and evaluate approaches to unforeseen or unique problems; performs or delegates all detail work necessary to determine optimum solutions; evaluates proposals and makes recommendations based on sound scientific principles and practical considerations; may provide work leadership for lower level employees; prepares cost and schedule estimates and technical documents on proposed projects in assigned area; demonstrates creative ability through patent disclosures, problem solving, scientific reports or technical papers and articles; participates in special projects as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years

MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-017HAC SR Scientist

Minimum/General Experience: Requires at last eight years' experience in Security IT arena **of which 2 years must be cybersecurity**. Also requires advanced knowledge of the principles, methods, theories, and techniques used in scientific functional area(s), advanced knowledge of the associated equipment and systems used in scientific functional area(s), and ability to serve as a technical task or project lead.

Functional Responsibility: Initiates, directs, and executes scientific research and/or development studies within a cybersecurity environment ; may serve as a technical team or task lead; plans and performs scientific duties on new and varied problems where only general objectives are stated; coordinates broad phases of a project and performs advanced development work to obtain or maintain technical leadership in assigned field; plans and executes laboratory research; plans scientific effort in coordination with related efforts of other projects, departments, etc.; establishes and defines the theoretical bases and principles which should apply and the empirical test procedures to be used; conducts investigations or tests pertaining to the development of new designs, methods, materials, or processes and investigates possible applications of results; interprets and evaluates test data and results of investigations and develops recommendations; recommends necessary corrections in technical analyses and design to ensure successful project completion; may provide technical consultation in area of specialty; may serve as a technical team or task lead; demonstrates creative ability through patent disclosures, problem solving, scientific reports or technical papers and articles; participates in special projects as required.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	14 years
AA/AS	12 years
BA/BS	10 years
Doctorate Degree/Ph.D.	7 years

ANT-018HAC Principal Scientist

Minimum/General Experience: Requires at least ten years' experience in a specific Security IT scientific field **of which 2 years must be cybersecurity**. Also requires advanced knowledge of the principles, methods, theories, and techniques used in scientific functional area(s), as well as associated equipment and systems used in scientific functional area(s). Must also have the ability to serve as a technical team or task lead.

Functional Responsibility: Initiates, directs, and executes advanced-level scientific research and/or development studies within a cybersecurity environment. Plans and performs advanced scientific studies on new and varied problems where only general objectives are stated; acts as technical liaison with customers and sponsors, to include the preparation and presentation of high-level technical information; interprets, organizes, and coordinates overall project assignments within an assigned scientific functional area; plans and executes laboratory research; analyzes, evaluates, and plans methods of approach for projects and organizes means to achieve the solution of problems; serves as technical team or task lead; may provide supervision to lower-level staff; establishes and defines the theoretical bases and principles which should apply and the empirical test procedures to be used; conducts complex investigations or tests pertaining to the development of new designs, methods, materials, or processes and investigates possible applications of results; interprets and evaluates test data and results of investigations and develops recommendations; recommends necessary corrections in technical analyses and design to ensure successful project completion; specifies equipment, materials and suppliers required for completion and implementation of projects; evaluates vendor capabilities to provide or build required services, supplies, or equipment; maintains a current knowledge of technologies through the careful review of reports, patents, literature and other data; demonstrates creative ability through patent disclosures, problem solving, scientific reports or technical papers and articles; participates in special projects as required.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	16 years
AA/AS	14 years
BA/BS	12 years
Doctorate Degree/Ph.D.	9 years

ANT-019HAC SR Principal Scientist

Minimum/General Experience: Requires fifteen years' experience in a specific Security IT scientific field **of which 2 years must be cybersecurity**. Also requires advanced knowledge of the principles, methods, theories, and techniques used in scientific functional area(s), advanced knowledge of the associated equipment and systems used in scientific functional area(s), and the ability to serve as a technical team or task lead and supervise and direct the work of assigned staff.

Functional Responsibility: Makes decisions and recommendations within a cybersecurity environment that are recognized as authoritative and have an important impact on extensive scientific activities of the organization. This individual acts as primary technical liaison with customers and sponsors, to include the preparation and presentation of high-level technical

information; analyzes, evaluates, and plans methods of approach for projects and organizes means to achieve the solution of problems; serves as technical team or task lead; supervises and directs the work of lower-level scientific and technical personnel; plans and executes laboratory research and/or the development and/or evaluation of advanced physics or first-principles engineering models; establishes and defines the theoretical bases and principles which should apply and the empirical test procedures to be used; conducts complex investigations or tests pertaining to the development of new designs, methods, materials, or processes and investigates possible applications of results; interprets and evaluates test data and results of investigations and develops recommendations; recommends necessary corrections in technical analyses and design to ensure successful project completion; specifies equipment, materials and suppliers required for completion and implementation of projects; evaluates vendor capabilities to provide or build required services, supplies, or equipment; maintains a current knowledge of technologies through the careful review of reports, patents, literature and other data; demonstrates creative ability through patent disclosures, problem solving, scientific reports or technical papers and articles; participates in special projects as required.

Minimum Education: Doctorate Degree/Ph.D.

Approved Substitutions	
Education	**Experience**
HS	22 years
AA/AS	20 years
BA/BS	18 years
MA/MS	16 years

ANT-023HAC JR Systems Engineer

Minimum/General Experience: Requires no experience and knowledge of the principles, methods, and techniques used in the engineering, development, maintenance, and application of multiple operating systems; knowledge of or certification in one or more specific applications or processes may be required, depending on job assignment; must have the ability to write, maintain, and modify technical documentation/specifications.

Functional Responsibility**:** Assists in the design, development, analysis, installation, maintenance, operation and servicing of computer operating/hardware systems within a cybersecurity environment ; provides customer support; works under direct supervision; does related work as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	4 years
AA/AS	2 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-024HAC Systems Engineer

Minimum/General Experience: Must have three years' experience of which at least one year must be specialized. Specialized experience includes: analytically solving workflows, organization, and/or planning problems. General experience includes increasing responsibilities in systems engineering.

Functional Responsibility: Designs software tools and subsystems to support software reuse and domain analysis within a cybersecurity environment . Interprets software requirements and design specifications to code, and integrates and tests software components .

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	7 years
AA/AS	5 years
MA/MS	1 years
Doctorate Degree/Ph.D.	0 years

ANT-025HAC Staff Systems Engineer

Minimum/General Experience: Must have six years' experience, of which at least three must be specialized. Specialized experience includes: supervision of system engineers, and demonstrated use of interactive, interpretative systems with on-line, real-time acquisition capabilities. General experience includes increasing responsibilities in systems engineering.

Functional Responsibility: Analyzes and studies complex system requirements within a cybersecurity environment . Designs software tools and subsystems to support software reuse and domain analyses and manages their implementation. Manages software development and support using formal specifications, data flow diagrams, other accepted design techniques and CASE tools. Estimates software development costs and schedule. Reviews existing programs and assists in making refinements, reducing operating time, and improving current techniques. Supervises software configuration management

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	10 years
AA/AS	8 years

MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-026HAC SR Systems Engineer

Minimum/General Experience: Must have eight years' directly related experience in all phases of systems engineering. Also requires advanced knowledge of the principles, methods, and techniques used in all phases of the engineering, application, and development of multiple operating systems; knowledge of or certification in specific applications or processes may be required, depending on job assignment.

Functional Responsibility: Participates in all phases of computer operating/hardware systems engineering, including design, analysis, and modeling at a highly technical level; analyzes complex computer software/hardware requirements to provide integration and implementation support within a cybersecurity environment ; performs operating/hardware systems engineering, including full life cycle design and development; analyzes and documents users' functional and data requirements; develops site survey instruments to gather detailed user requirements and business process analysis data; conducts functional user interviews to document functional, system, customization, and data requirements and data sources; formulates system concepts and architecture, specifies requirements, and develops implementation approaches; determines data requirements for internal processes and external interfaces; develops new systems or tailors commercial products to meet user requirements; directs and coordinates all activities necessary to complete a major engineering project or several small projects to specification and on schedule; may serve as task or project lead, exercising leadership in either a technical role training other hardware engineers and implementing and enforcing established standards and technologies, or in a project coordination role leading tasks and assuming responsibility for the design, development, test and delivery of a software system or application;

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-027HAC Principal Systems Engineer

Minimum/General Experience: Must have ten years' directly related experience in all phases of systems engineering. Requires advanced knowledge of the principles, methods, and techniques used in all phases of the engineering, application, and development of multiple operating systems; knowledge of or certification in specific applications or processes may be required, depending on job assignment.

Functional Responsibility: Establishes state-of-the-art techniques for designing, developing, modifying and troubleshooting highly complex computer operating/hardware system within a cybersecurity environment; may work independently on projects requiring advanced, concentrated and diversified knowledge regarding engineering principles in broad assignment areas or may serve as project lead with supervisory responsibilities. Designs operating/hardware systems; formulates system concepts and architecture, specifies requirements, and develops implementation approaches; identifies and directs resolution of complex hardware/software interface issues; subject matter expert on emerging technologies; directs the development of systems specifications and technical documentation; may serve as project lead, either working independently in a technical role in field of specialization, or in providing work leadership with management or supervisory responsibility for the group;

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-028HAC SR Principal Systems Engineer

Minimum/General Experience: Must have fifteen years' directly related experience in all phases of systems engineering. Also requires advanced knowledge of the principles, methods, and techniques used in all phases of the engineering, application, and development of multiple operating systems; knowledge of or certification in specific applications or processes may be required, depending on job assignment.

Functional Responsibility: Works at the highest systems level to provide expert advice and counsel to assigned functional/user area managers and project teams for systems of the most complex nature, often crossing functional lines within a cybersecurity environment. Designs major computer systems; coordinates work on subsystems; oversees the integration of new applications with established systems and files; confers with assigned systems users and evaluates utilization to identify requirements modifications which will facilitate integration, increase efficiency and/or reduce costs; investigates new procedures, equipment and operating systems to determine their usefulness and applicability to operations; assists systems management in developing systems analysis standards and provides consultative direction to applications programmers, systems software engineers, computer center operations and user personnel in the planning and scheduling of systems

projects which cross functional lines or are of the most complex nature.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	17 years
AA/AS	15 years
BA/BS	13 years
Doctorate Degree/Ph.D.	14 years

ANT-029HAC Information Engineer

Minimum/General Experience: Must have a minimum of five years' experience, of which at least two years must be specialized in Security information systems development, **cybersecurity**, functional and data requirements analysis, systems analysis and design, programming, program design and documentation preparation. The following experience is also required: two years' experience in the implementation of information engineering projects and experience in systems analysis; design and programming using CASE and IE tools and methods. Two years business/functional experience is desirable, to support the business modeling activities. Must demonstrate the ability to work independently or under only general direction.

Functional Responsibility: Applies a business-wide set of disciplines for the planning, analysis, design and construction of information systems on a business-wide basis or across a major sector of the business within a cybersecurity environment. Performs business strategic systems planning, information planning, business and analysis. Performs process and data modeling in support of the planning and analysis efforts using both manual and automated tools such as Integrated Computer Aided Software Engineering (I-CASE) tools. Applies reverse engineering and reengineering disciplines to develop migration strategic and planning documents. Provides technical guidance in software engineering techniques and automated support tools.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-030HAC SR Information Engineer

Minimum/General Experience: Must have at least eight years' experience, of which at least five must be specialized in Security information systems development, functional and data requirements analysis, systems analysis and design, programming, program design and documentation preparation. The following experience is also required: demonstrated experience in the implementation of information engineering projects; systems analysis, design and programming using CASE and IE tools and methods and three to five years of business or functional experience. Must demonstrate the ability to work independently or under only general direction.

Functional Responsibility: Applies business process improvement practices to reengineer methodologies/principles and business process modernization projects within a cybersecurity environment. Applies, as appropriate, activity and data modeling, transaction flow analysis, internal control and risk analysis and modern business methods and performance measurement techniques. Assist in establishing standards for information systems procedures. Develops and applies organization-wide information models for use in designing and building integrated, shared software and database management systems. Construct sound, logical business improvement opportunities consistent with the CIM guiding principles, cost savings, and open system architecture objectives. Provides daily supervision and direction to staff.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-031HAC Principal Information Engineer

Minimum/General Experience: Must have at least ten years' experience in Security information systems development, **cybersecurity,** functional and data requirements analysis, systems analysis and design, programming, program design and documentation preparation. A minimum of five years' experience is required in the following: demonstrated experience in managing the implementation of information engineering projects and experience in systems analysis, design and programming using CASE and IE tools and methods. Proven managerial and supervisory skills. Demonstrated exceptional written and oral communications skills, including giving formal presentations to different audiences. Must demonstrate the ability to work independently or under only general direction.

Functional Responsibility: Applies an enterprise-wide set of disciplines for the planning, analysis, design and construction of information systems on an enterprise-wide basis or across a major sector of the enterprise within a cybersecurity environment.

Develops analytical and computational techniques and methodology for problem solutions. Performs enterprise-wide strategic systems planning, business information planning, business and analysis. Performs process and data modeling in support of the planning and analysis efforts using both manual and automated tools such as Integrated Computer Aided Software Engineering (I-CASE) tools. Applies reverse engineering and re-engineering disciplines to develop migration strategic and planning documents. Provides technical guidance in software engineering techniques and automated support tools.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	14 years
AA/AS	12 years
MA/MS	8 years
Doctorate Degree/Ph.D.	7 years

ANT-032HAC JR Software Engineer

Minimum/General Experience: Requires no experience and requires knowledge of the fundamental concepts, practices and procedures used in software engineering and applications and systems development.

Functional Responsibility: Assists in the design, development, analysis, and implementation of software operating systems and software application programs within a cybersecurity environment ; works under general supervision; does related work as required. Works from specifications to develop and modify operating systems and software applications; participates in the design, coding, testing, debugging, and documentation of programs; assists in the definition of limited design specifications and parameters; assists engineers or analysts with the hardware/software integration of the application or utility into software operating systems; assists in the analysis of system architecture requirements; may customize purchased applications; participates in the research of emerging technologies to determine impacts on application execution; analyzes and documents client needs and requirements; assists with writing, modifying, and maintaining technical documentation and specifications such as user manuals, system documentation, and training materials; performs integration testing and support of various computer operating and/or network systems; troubleshoots and provides customer support for software operating system and application issues; maintains current knowledge of relevant hardware and software applications as assigned.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	4 years
AA/AS	2 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-033HAC Software Engineer

Minimum/General Experience: Requires at least two years' directly related experience in Security IT software engineering **or cybersecurity**, including the design, coding, testing, and documentation of computer programs. Also requires knowledge of the fundamental concepts, practices and procedures used in software engineering and applications and systems development.

Functional Responsibility: Participates in the design, development, analysis, and implementation of software operating systems and software application programs within a cybersecurity environment ; works under general supervision; performs software operating systems and application engineering, including full life cycle design and development; works from specifications to develop and modify operating systems and software applications; participates in the design, coding, testing, debugging, and documentation of programs; participates in the definition of limited design specifications and parameters; assists engineers or analysts with the hardware/software integration of the application or utility into software operating systems; analyzes system architecture requirements; performs requirements acquisition and definition and data analysis; may customize purchased applications; performs technical and subject matter research on emerging technologies to determine impacts on application execution; analyzes and documents client needs and requirements; participates in the writing, modifying, and maintaining technical documentation and specifications such as user manuals, system documentation, and training materials; performs integration testing and support of various computer operating and/or network systems; troubleshoots and provides customer support for software operating system and application issues; maintains current knowledge of relevant hardware and software applications as assigned; participates in special projects as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-034HAC Staff Software Engineer

Minimum/General Experience: Requires at least three years' directly related experience in Security IT software engineering, **or cybersecurity** including the design, coding, testing, and documentation of computer programs. Also requires knowledge of the fundamental

concepts, practices and procedures used in software engineering and applications and systems development.

Functional Responsibility: Performs software operating systems and software application programs design, development, analysis, and implementation within a cybersecurity environment ; performs software operating systems and application engineering, including full life cycle design and development; works under limited supervision; works from specifications to develop and modify operating systems and software programming applications; designs, codes, tests, debugs, and documents programs; defines limited design specifications and parameters; resolves hardware/software compatibility and interface design considerations; analyzes system architecture requirements; performs requirements acquisition and definition and data analysis; may customize purchased applications; conducts technical and subject matter research on emerging technologies to determine impacts on application execution; analyzes and documents client needs and requirements; participates in writing, modifying, and maintaining technical documentation and specifications such as user manuals, system documentation, and training materials; performs integration testing and support of various computer operating and/or network systems; troubleshoots and provides customer support for software operating systems and application issues; maintains current knowledge of relevant hardware and software applications as assigned.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	7 years
AA/AS	5 years
MA/MS	1 years
Doctorate Degree/Ph.D.	0 years

ANT-035HAC SR Software Engineer

Minimum/General Experience: Requires at least five years' directly related experience in the design, writing, and testing of Security IT computer **or cybersecurity** programs or database development. Also requires comprehensive knowledge of the principles, practices, and procedures used in all phases of full life cycle applications and systems development, engineering, programming, and analysis

Functional Responsibility: Participates in all phases of software operating systems and software application programs engineering, including design, analysis, and modeling at a highly technical level within a cybersecurity environment; Performs software operating systems and application engineering, including full life cycle application systems design and development; assesses system architecture and hardware limitations; defines and selects new concepts and approaches for the design, development, and implementation of software engineering applications; defines complex design specifications and parameters; resolves complex hardware/software compatibility and interface design considerations; performs requirements acquisition and definition and data analysis; directs research on emerging technologies to determine impacts on application execution; performs systems modeling; may perform database analysis, design, implementation, and testing; writes, modifies, and maintains technical documentation and specifications such as user manuals, system documentation, and training materials; performs integration testing and support of various computer operating and/or network systems; troubleshoots and provides customer support for software operating systems and application issues; analyzes and documents client needs and requirements; serves as liaison with clients, participates in meetings to ensure client needs are met and may make client presentations; may serve as task or team lead, exercising leadership in either a technical role training other software engineers and implementing and enforcing established standards and technologies, or in a project coordination role leading tasks and assuming responsibility for the design, development, test and delivery of a software system or application;

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-036HAC Principal Software Engineer

Minimum/General Experience: Requires at least eight years' directly related experience in the design, writing, and testing of Security IT **or cybersecurity** computer programs or database development, with two or more years experience in software operating systems architecture. Also requires expert knowledge of the principles, practices, and procedures used in all phases of full life cycle applications and systems development, engineering, programming, and analysis at a highly technical level.

Functional Responsibility: Participates in all phases of software operating systems and software application programs engineering, including design, analysis, and modeling at an expert level within a cybersecurity environment; establishes state-of-the-art techniques for designing, developing, modifying and troubleshooting highly complex software operating systems and applications architectures; defines complex design specifications and parameters; identifies and directs resolution of complex hardware/software interface issues; can serve as a subject matter expert on emerging technologies; directs the development of systems

specifications and technical documentation; may serve as project lead, either working independently in a technical role in field of specialization, or providing work leadership with management or supervisory responsibility for the group.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-037HAC Software Architect

Minimum/General Experience: Requires ten years directly related experience in the design, writing, and testing of Security IT **or cybersecurity** computer programs or database development, with four or more years experience in software operating systems architecture. Also requires expert knowledge of the principles, practices, and procedures used in all phases of full life cycle applications and systems development, engineering, programming, and analysis at a highly technical level.

Functional Responsibility: Establishes state-of-the-art techniques for designing, developing, modifying and troubleshooting highly complex software operating systems and applications architectures within a cybersecurity environment ; defines complex design specifications and parameters; identifies and directs resolution of complex hardware/software interface issues; is recognized as a subject matter expert in all areas of software engineering, including emerging technologies; directs the development of systems specifications and technical documentation; may serve as project lead, either working independently in a technical role in field of specialization, or providing work leadership with management or supervisory responsibility for the group; responsible for task cost, schedule and level of effort estimates; reports project progress directly to senior management; performs business development services; may provide expertise to multiple projects and tasks; may supervise and direct the work of assigned staff.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	16 years
AA/AS	14 years
BA/BS	12 years
Doctorate Degree/Ph.D.	9 years

ANT-038HAC Computer Security Specialist

Minimum/General Experience: Must have a minimum of seven years' experience, of which at least five years must be Security information security/Information Assurance (IA)/ **or cybersecurity** experience. Must have experience in security administration, evaluation of security/Information Assurance product capabilities, assessment and policy development. Must have a solid understanding of federal information security/assurance policies, standards and regulations.

Functional Responsibility: Gathers and organizes technical information about an organization's mission goals and needs within a cybersecurity environment, IT infrastructure and existing security/IA products. Assists in developing security/IA policies, procedures and standards. Responsibilities will include working with the customer to minimize risks and assess and secure networks.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
MA/MS	5 years
Doctorate Degree/Ph.D.	4 years

ANT-039HAC SR Computer Security Specialist

Minimum/General Experience: Must have a minimum of ten years' experience, of which at least eight must be Security information security/Information Assurance (IA)/ **or cybersecurity** experience. Must have experience in security administration, evaluation of security/Information Assurance product capabilities, assessment and policy development. Must have a solid understanding of federal information security/assurance policies, standards and regulations.

Functional Responsibility: Gathers and organizes technical information about an organization's mission goals and needs within a cybersecurity environment, IT infrastructure, and existing security/IA products. Assists in developing security/IA policies, procedures, and standards. Responsibilities will include working with the customer to minimize risks and assess and secure networks. Evaluates and recommends security products for various platforms and initiatives. May act as a project leader and provide technical leadership and guidance.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	14 years
AA/AS	12 years
MA/MS	8 years
Doctorate Degree/Ph.D.	7 years

ANT-040HAC JR Database Architect

Minimum/General Experience: Requires at least two years' directly related experience in the design, maintenance, and coding of Security IT **or cybersecurity** databases. Also requires knowledge of the principles, methods, and techniques used in all phases of database development, coding, and design, including business analysis, event modeling, logical and physical database design, data access analysis and design, DBMS optimization, archive and recovery strategy, load strategy design and implementation, security, and change management.

Functional Responsibility: Participates in the design, maintenance, enhancement, and coding of relational databases within a cybersecurity environment; analyzes and determines information needs and elements, data relationships and attributes, data flow and storage requirements, and data output and reporting capabilities; assists on developing data modeling and participates in data acquisition and access analysis and design, and archive, recovery, and load strategy design and implementation; coordinates new data development ensuring consistency and integration with existing data warehouse structure; reviews requests for data and data usage, researches data sources for new and better data feeds; participates in continuous improvement efforts in enhancing performance and providing increased functionality; assists with the development of screens and queries; tests designed applications; assists with upgrades and maintenance of hardware and software; maintains current knowledge of relevant hardware and software applications as assigned; participates in special projects as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-041HAC Database Architect

Minimum/General Experience: Requires at least three years' directly related experience in the design, maintenance, and coding of Security IT **or cybersecurity** databases. Also requires knowledge of the principles, methods, and techniques used in all phases of database development, coding, and design, including business analysis, event modeling, logical and physical database design, data access analysis and design, DBMS optimization, archive and recovery strategy, load strategy design and implementation, security, and change management

Functional Responsibility: Designs, maintains, enhances, and codes relational databases within a cybersecurity environment; analyzes and determines information needs and elements, data relationships and attributes, data flow and storage requirements, and data output and reporting capabilities; develops data modeling and participates in data acquisition and access analysis and design, and archive, recovery, and load strategy design and implementation; coordinates new data development ensuring consistency and integration with existing data warehouse structure; reviews requests for data and data usage, researches data sources for new and better data feeds; participates in continuous improvement efforts in enhancing performance and providing increased functionality; designs data structures to accommodate database production, storage, maintenance, and accessibility; develops screens and queries; tests designed applications; performs upgrades and maintenance of hardware and software; provides technical support and guidance to users; maintains current knowledge of relevant hardware and software applications as assigned; may serve as team or technical task lead; participates in special projects as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	7 years
AA/AS	5 years
MA/MS	1 years
Doctorate Degree/Ph.D.	0 years

ANT-042HAC SR Database Architect

Minimum/General Experience: Requires at least five years' directly related experience in the design, maintenance, and coding of Security IT **or cybersecurity** databases. Also requires advanced knowledge of the principles, methods, and techniques used in all phases of database development, coding, and design, including business analysis, event modeling, logical and physical database design, data access analysis and design, DBMS optimization, archive and recovery strategy, load strategy design and implementation, security, and change management.

Functional Responsibility: Designs, maintains, enhances, and codes relational databases within a cybersecurity environment; analyzes and determines information needs and elements, data relationships and attributes, data flow and storage requirements, and data output and reporting capabilities; develops data modeling and is responsible for data acquisition and access analysis and design, and archive, recovery, and load strategy design and implementation; coordinates new data development ensuring consistency and integration with existing data warehouse structure; reviews business requests for data and data usage, researches data sources for new and better data feeds; participates in continuous improvement efforts in enhancing performance and providing increased functionality; designs data structures to accommodate database production, storage, maintenance, and accessibility; develops screens and queries; tests

designed applications; may perform upgrades and maintenance of hardware and software; provides technical support and guidance to users; maintains current knowledge of relevant hardware and software applications as assigned; may serve as team or technical task lead and provide guidance and training to lower-level staff; participates in special projects as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-045HAC Computer Programmer/Analyst

Minimum/General Experience: Must have at least three years' experience in the Security IT **or cybersecurity** computer programming field. Depending on the job assignment, knowledge of or certification in specific applications or processes may be required in the following areas: Web technologies, design technologies, specific programming languages, authoring languages and systems, and Modeling and Simulation (M&S) technologies, processes, and tools.

Functional Responsibility: Generates new code and corrects, converts, and/or modifies existing code to meet documented standards within a cybersecurity environment; designs new and/or redesigns and maintains existing software products; identifies client needs and requirements based on evaluation of client documentation and interviews; performs data and technical analysis; performs a variety of testing procedures on assigned products, analyzes test results, and corrects problems; prepares test scripts and descriptions and examines to locate necessary modifications; analyzes and modifies program specifications and documentation to support contract requirements; may design and develop computer-based and/or multimedia courseware for customer training initiatives utilizing appropriate authoring languages, systems, animation and graphics software; provides customer support to clients and troubleshoots problems.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	7 years
AA/AS	5 years
MA/MS	1 years
Doctorate Degree/Ph.D.	0 years

ANT-046HAC Staff Computer Programmer/Analyst

Minimum/General Experience: Requires at least four years' experience in the Security IT **or cybersecurity** computer programming field. Depending on the job assignment, knowledge of or certification in specific applications or processes may be required in the following areas: Web technologies, design technologies, specific programming languages, authoring languages and systems, and Modeling and Simulation (M&S) technologies, processes, and tools.

Functional Responsibility: Programs, designs, analyzes, codes, implements, and tests software applications and modules in various languages, including business software systems and applications within a cybersecurity environment ; provides network support including providing technical solutions and training; writes, modifies, and maintains software documentation and specifications; performs integration testing and support of various computer operating and/or network systems; installs, configures, and troubleshoots various hardware and software platforms; analyzes and documents client needs and requirements; may train other programmer/analysts; develops product documentation to describe system requirements and use; may design and develop computer-based and/or multimedia courseware for customer training initiatives utilizing appropriate authoring languages, systems, animation and graphics software; participates in meeting; prepares reports on analyses, findings, and project progress; performs technical research on emerging technologies to determine impacts on application execution.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	8 years
AA/AS	6 years
MA/MS	2 years
Doctorate Degree/Ph.D.	1 years

ANT-047HAC SR Computer Programmer/Analyst

Minimum/General Experience: Requires at least five years' experience in the Security IT **or cybersecurity** computer programming field. Depending on the job assignment, knowledge of or certification in specific applications or processes may be required in the following areas: Web technologies, design technologies, specific programming languages, authoring languages and systems, and Modeling and Simulation (M&S) technologies, processes, and tools.

Functional Responsibility: Participates in all phases of software development, including system design, analysis, architecture, and engineering; programs, designs, analyzes, codes, implements, and tests software applications, modules, and databases in various languages, including those associated with scientific,

technical, or engineering problems within a cybersecurity environment ; performs process analyses in order to recommend improvements; performs system, network, and/or database administration, analysis, design, implementation, and testing; analyzes and documents client needs and requirements; provides technical support including providing technical solutions and training; writes, modifies, and maintains software documentation and specifications;
Performs a variety of testing for computer operating and/or network systems; performs data and technical analysis and information engineering; installs, configures, and troubleshoots various hardware and software platforms; may design and develop computer-based and/or multimedia courseware for customer training initiatives utilizing appropriate authoring languages, systems, animation and graphics software; participates in meetings and design reviews; prepares reports on analyses, findings, and project progress; performs technical research on emerging technologies to determine impacts on application execution; may serve as a technical task or team lead.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-048HAC Principal Computer Programmer/Analyst

Minimum/General Experience: Requires at least eight years' experience in the Security IT **or cybersecurity** computer programming field. Depending on the job assignment, knowledge of or certification in specific applications or processes may be required in the following areas: Web technologies, design technologies, specific programming languages, authoring languages and systems, and Modeling and Simulation (M&S) technologies, processes, and tools.

Functional Responsibility: Participates in all phases of software development, including system design, analysis, architecture, and engineering; plans and directs the development of major programming projects and the installation of systems within a cybersecurity environment; programs, designs, analyzes, codes, implements, and tests software applications, modules, and databases in various languages, including those associated with scientific, technical, or engineering problems; performs process analyses in order to recommend improvements; performs system, network, and/or database administration, analysis, design, implementation, and testing; analyzes and documents client needs and requirements; provides technical support including providing technical solutions and training; writes, modifies, and maintains software documentation and specifications; performs a variety of testing for computer operating and/or network systems; performs data and technical analysis and information engineering; installs, configures, and troubleshoots various hardware and software platforms; may design and develop computer-based and/or multimedia courseware for customer training initiatives utilizing appropriate authoring languages, systems, animation and graphics software; participates in meetings and design reviews; prepares reports on analyses, findings, and project progress; may supervise and direct the work of lower-level analysts; performs technical research on emerging technologies to determine impacts on application execution; may serve as a technical task or team lead.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-049HAC Computer Systems Programmer

Minimum/General Experience: Must have at least five years' experience, of which at least three years must be specialized in Security IT **or cybersecurity** arena. Specialized experience includes: systems analysis and programming. Must demonstrate the ability to work independently or under only general direction.

Functional Responsibility: Create and/or maintain operating systems, communications software, database packages, compilers, assemblers, and utility programs. Modify existing software, as well as create special-purpose software to ensure efficiency and integrity between systems and applications. Assist in the development, testing and maintenance of disaster recovery procedures.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-050HAC Web Designer

Minimum/General Experience: Requires at least two years experience in Security IT **or cybersecurity** Web design. Also requires knowledge of the principles, methods, and techniques used in Web design.

Functional Responsibility: Designs and builds Web pages using a variety of graphics software applications, techniques, and tools within a cybersecurity environment; designs and develops user-interface features, site animation, and special-effects elements; designs the Website to support the customer's strategies and goals relative to external communications; contributes to the Web design group's efforts to specify, improve, and implement the look, feel, and function of online projects; interfaces directly with customers, users, graphic artists, and Web software developers.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-051HAC Web Developer

Minimum/General Experience: Requires at least four years' experience in Security IT **or cybersecurity** software development, installation, and modification in an online environment.

Functional Responsibility: Provides application development and technical support for internal and external Webs within a cybersecurity environment ; develops Web pages and applications for customers; collaborates with graphic artists to develop Web page graphics that support interactive, marketing-focused content; provides technical consultation in new systems development, new package evaluations and enhancements of existing systems; prepares functional specifications from which programs will be written, then designs, codes, tests, debugs and documents programs; participates in the technical design, development, testing, implementation and maintenance of Web site enhancements; plans, schedules and conducts systems tests, monitors test results, and takes appropriate corrective action; may prepare technical user guides.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	8 years
AA/AS	6 years
MA/MS	2 years
Doctorate Degree/Ph.D.	1 years

ANT-052HAC SR Web Developer

Minimum/General Experience: Requires at least eight years' experience, of which at least two years must include technical leadership experience and at least four years' experience in Security IT **or cybersecurity** software development, installation, and modification in an online environment.

Functional Responsibility: Designs and develops well-integrated and cost-effective solutions for internal and external Webs within a cybersecurity environment ; works closely with client project managers and technical leaders to understand customers' business objectives and systems requirements; designs and develops Web infrastructures; designs and implements an intranet strategy for authorization of users to access controlled components; designs relational databases to perform well logically and physically for decision support; coordinates enhancements and maintenance of Web systems and sites; provides recommendations for server operating systems, hardware requirements and encryption standards for communications to and from secure servers; provides technical advice and expertise to Webmasters and Web developers in the installation, acceptance testing, and evaluation of newly released and beta software; may serve as a functional/technical team or task lead.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-053HAC Web Tech Administrator

Minimum/General Experience: Requires at least four years' experience in Security IT **or cybersecurity** systems technology. Must have an understanding of federal information security/assurance policies, standards and regulations.

Functional Responsibility: Responsible for achieving overall technical integrity of organization's Website within a cybersecurity environment . Maintains and upgrades hardware and software including website technical architecture related to hardware and telecommunication connectivity. Administers e-mail, chat, and FTP and HTTP services. Communicates router configuration changes and troubleshoots system errors and bugs. Maintains servers, creates monitoring reports and logs, and ensures functionality of links. Monitors site for acceptable performance and user accessibility. Establishes backups and monitors site security.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	8 years
AA/AS	6 years

MA/MS	2 years
Doctorate Degree/Ph.D.	1 years

ANT-054HAC Web Content Manager

Minimum/General Experience: Requires at least two years' experience in Security IT **or cybersecurity** production management, Web page design, Web design languages, and Web graphics types and standards.

Functional Responsibility: Responsible for developing and providing content within a cybersecurity environment that will motivate and entertain users so that they regularly access the Website and utilize it as a major source for information and decision making. Responsible for managing/performing Website editorial activities including gathering and researching information that enhances the value of the site. Locates, negotiates, and pursues content. Seeks out customers to gather feedback for Website improvement and enhancements.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-055HAC Web Security Administrator

Minimum/General Experience: Requires at least four years' experience in Security IT **or cybersecurity** software development, installation, and modification in an online environment. Requires experience in security administration, evaluation of security/Information Assurance (IA) product capabilities, assessment and policy development. Must have a solid understanding of federal information security/assurance policies, standards and regulations.

Functional Responsibility: Performs all procedures necessary to ensure the safety of the organization's Website and transactions across the Internet. Applies Internet Firewall technologies to maintain security. Ensure that the user community understands and adheres to necessary procedures to maintain security. Works under limited supervision.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	8 years
AA/AS	6 years
MA/MS	2 years
Doctorate Degree/Ph.D.	1 years

ANT-057HAC Computer Systems Analyst

Minimum/General Experience: Must have at least three years of computer experience in assignments of a Security IT **or cybersecurity** technical nature working under close supervision and direction. Must have at least one year experience in analyzing and programming applications on large-scale on mid-tier computers (or LAN-based) with a minimum of one year of design and programming of moderately complex ADP systems.

Functional Responsibility: Develops requirements for information systems from a project's inception to conclusion. Develops required specifications for simple to moderately complex systems within a cybersecurity environment . Assists senior computer systems analyst in preparing input and test data for the proposed system.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	7 years
AA/AS	5 years
MA/MS	1 years
Doctorate Degree/Ph.D.	0 years

ANT-058HAC Staff Computer Systems Analyst

Minimum/General Experience: Must have five years of computer experience in Security IT **or cybersecurity** information systems design and management. At least three years of experience in analysis and design of business applications for complex large-scale or mid-tier computer systems, or LAN-based systems.

Functional Responsibility: Analyzes and develops computer software processing a wide range of capabilities , including numerous engineering, business, and records management duties within a cybersecurity environment . Develops plans for systems from project inception to conclusion. Analyzes the problem and the information to be processed. Defines the problem, and develops system requirements and program specifications from which programmers prepare detailed flow charts, programs, and tests. Coordinates closely with programmers to ensure proper implementation of program and system specifications. Develops, in conjunction with functional users, system alternative solutions.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years

MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-059HAC SR Computer Systems Analyst

Minimum/General Experience: Must have eight years of computer experience working independently or under general direction on complex Security IT **or cybersecurity** application problems involving all phases of systems analysis. At least five years' experience in analysis and design of business applications for complex, large-scale or mid-tier computer systems, or LAN-based systems.

Functional Responsibility: Analyzes and evaluates user needs and identifies resources required for each task to determine functional requirements within a cybersecurity environment ; conceptualizes, develops, and implements complex systems designed to meet client requirements; defines systems objectives and prepares system design specifications to meet requirements; designs, develops, implements, and tests new systems or modifies existing systems that meet the user's needs; codes applications and tests to software requirements; writes or updates software specifications; analyzes procedures and systems to refine their formulation and convert to programmable formats; analyzes data requirements to determine data source and destinations; coordinates with client to define problem, determine data availability, report requirements, and resolve system design problems; creates logical data models based on functional requirements; performs quality review of specifications for internal and external delivery; troubleshoots and provides technical support and solutions to users; develops analytical tools for use in the design and redesign of programs as assigned; may serve as a technical team or task lead.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-060HAC Principal Computer Systems Analyst

Minimum/General Experience: Must have ten years' of computer experience working independently or under general direction on complex Security IT **or cybersecurity** application problems involving all phases of systems analysis. At least five years' experience in analysis and design of business applications for complex, large-scale or mid-tier computer systems, or LAN-based systems.

Functional Responsibility: Analyzes and evaluates user needs and identifies resources required for each task to determine functional requirements within a cybersecurity environment ; conceptualizes, develops, and implements complex systems designed to meet client requirements; defines systems objectives and prepares system design specifications to meet requirements; designs, develops, implements, and tests new systems or modifies existing systems that meet the user's needs; develops and executes test plans; codes applications and tests to software requirements; writes or updates software specifications as necessary; writes technical project documentation including detailed design documents and program specifications; analyzes procedures and systems to refine their formulation and convert to programmable formats; analyzes data requirements to determine data source and destinations; coordinates with client to define problem, determine data availability, report requirements, and resolve system design problems; creates logical data models based on functional requirements; performs quality review of specifications for internal and external delivery; troubleshoots and provides technical support and solutions to users; develops analytical tools for use in the design and redesign of programs as assigned; may serve as a technical task or team lead.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	14 years
AA/AS	12 years
MA/MS	8 years
Doctorate Degree/Ph.D.	7 years

ANT-061HAC Legacy System Analyst

Minimum/General Experience: Expert with at least five years of experience in a specific Security IT **or cybersecurity** "legacy system(s)" functionality to include knowledge of designated "legacy" hardware, operating systems, capacities, configurations, applications programs, preference programming languages, and administration, operations, and maintenance characteristics of the designated "legacy" system.

Functional Responsibility: Analyze requirements for maintaining, modifying or converting unique application systems within a cybersecurity environment that are deemed "legacy" systems . Provide guidance and technical/functional advice to programmers. Provide unique knowledge of the history of changes to the "legacy" applications. Develop plans to migrate "legacy" systems to new technologies and/or new functionality. Analyze and document "legacy" system functionality to identify mandatory requirements to be fulfilled by migration system candidates. May also participate in the analysis and evaluation of migration system candidates. May also participate in designing, developing and implementing

changes to "legacy" systems to accommodate such requirements as interim interfaces to migration systems and/or conversion to migration systems.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	5 years
AA/AS	3 years
BA/BS	1 year
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-062HAC JR Functional Analyst/Specialist

Minimum/General Experience: Requires at least one year directly related experience in a specific Security IT **or cybersecurity** functional area.

Functional Responsibility: Analyzes user needs and performs research and functional analysis on a variety of projects within a cybersecurity environment ; works under direct supervision; does related work as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	5 years
AA/AS	3 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-063HAC Functional Analyst/Specialist

Minimum/General Experience: This position requires a minimum of five years' experience, of which at least three years must be Security IT **or cybersecurity** specialized. Specialized experience includes: developing functional requirements for complex integrated systems. Must demonstrate the ability to work independently or under only general direction.

Functional Responsibility: Analyzes user needs to determine functional requirements within a cybersecurity environment. Performs functional allocation to identify required tasks and their interrelationships. Identifies resources required for each task.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-064HAC SR Functional Analyst/Specialist

Minimum/General Experience: This position requires a minimum of seven years' experience, of which at least six years must be Security IT **or cybersecurity** specialized. Specialized experience includes: developing functional requirements for complex integrated systems. Must demonstrate the ability to work independently or under only general direction.

Functional Responsibility: Analyze user needs to determine functional requirements within a cybersecurity environment. Performs functional allocation to identify required tasks and their interrelationships. Identifies resources required for each task. Provides daily supervision and direction to support staff.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
MA/MS	5 years
Doctorate Degree/Ph.D.	4 years

ANT-065HAC Principal Functional Analyst/Specialist

Minimum/General Experience: This position requires at least eight years' experience, of which at least six years must be Security IT **or cybersecurity** specialized. Specialized experience includes developing functional requirements for complex integrated systems. Requires advanced technical knowledge of the principles, methods, techniques, work processes, and applicable regulations in assigned subject-matter area(s).

Functional Responsibility: Analyzes user needs and performs research and functional analysis on a variety of projects within a cybersecurity environment at a highly technical level; may have supervisory responsibility; serves as technical advisor to clients in assigned subject areas' recommends functional changes, and identifies areas for further investigation; generates recommendations in the form of technical briefings, reports, and other major documents provided to senior level client personnel; may serve as a technical team or task lead.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	14 years
AA/AS	12 years
BA/BS	10 years

Doctorate Degree/Ph.D.	7 years

ANT-066HAC SR Principal Functional Analyst/Specialist

Minimum/General Experience: This position requires at least ten years' experience, of which at least six years must be Security IT **or cybersecurity** specialized. Specialized experience includes developing functional requirements for complex integrated systems. Requires advanced technical knowledge of the principles, methods, techniques, work processes, and applicable regulations in assigned subject-matter area(s).

Functional Responsibility: Analyzes user needs and performs research and functional analysis on a variety of cybersecurity projects at a highly technical level; may have supervisory responsibility; serves as technical advisor to clients in assigned subject areas; recommends functional changes, and identifies areas for further investigation; generates recommendations in the form of technical briefings, reports, and other major documents provided to senior level client personnel; serves as primary client liaison and coordinates with sub-contractors, government personnel, and technical experts; serves as technical team or task lead.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	16 years
AA/AS	14 years
BA/BS	12 years
Doctorate Degree/Ph.D.	9 years

ANT-067HAC Data Management Specialist

Minimum/General Experience: Must have at least six years' experience, of which at least three years must be Security IT **or cybersecurity** specialized. Specialized experience includes: demonstrated experience using current DBMS technologies, application design utilizing database management systems and experience with DBMS internals. General experience includes increasing responsibilities in DBMS systems analysis and programming. Must demonstrate the ability to work independently or under only general direction.

Functional Responsibility: Provides highly technical expertise in the use of DBMS within a cybersecurity environment. Evaluates and recommends available DBMS products to support validated user requirements. Defines file organization, indexing methods, and security procedures for specific user applications.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	10 years
AA/AS	8 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-068HAC Data Administrator

Minimum/General Experience: Must have at least six years' of general experience in Security IT **or cybersecurity** systems analysis or programming including four years of specialized experience in DBMS.

Functional Responsibility: Provides highly technical expertise and guidance in the design, implementation, operation and maintenance of database management systems (DBMS) within a cybersecurity environment . Evaluates and recommends available DBMS products after matching requirements with system capabilities. Determines file organization, indexing methods, and security procedures for specific applications. Controls the design and use of databases. Controls the global view of databases, controls the access to the databases, assures the safekeeping of the databases (from accidental or intentional damage or loss), and monitors the use of databases. Must be capable of defining all required database administration policies, procedures, standards, and guidelines. Is an authority on the design of databases and the use of database management systems. Evaluates and recommends available DBMS products after matching requirements with system capabilities. Prepares and delivers presentations on DBMS concepts.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	10 years
AA/AS	8 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-069HAC Data Manager

Minimum/General Experience: Must have at least seven years' experience, of which at least five must be Security IT **or cybersecurity** specialized. Specialized experience includes: demonstrated experience using current DBMS technologies, application design utilizing various database management systems and experience with DBMS internals. General experience includes increasing responsibilities in DBMS systems analysis and programming. Must demonstrate the ability to work independently or under only general direction.

Functional Responsibility: Manages the development of database projects within a cybersecurity environment . Plans and budgets staff and database resources. When necessary, reallocates resources to maximize benefits. Prepares and delivers presentations on Database Management Systems (DBMS) concepts. Provides daily supervision and direction to support staff.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
MA/MS	5 years
Doctorate Degree/Ph.D.	4 years

ANT-070HAC Computer Operations Manager

Minimum/General Experience: Must have at least six years' experience, of which at least three years are Security IT **or cybersecurity** specialized. Specialized experience includes: supervision and operations experience on a large-scale computer system, knowledge of hardware, software and operating systems. General experience includes operations experience on a large-scale computer system.

Functional Responsibility: Manages the work of computer operations personnel within a cybersecurity environment; identifies processing requirements and schedules job streams for computer runs; responsible for security and routing of input and output data, problem resolution and restart/recovery, interpreting technical documentation standards and preparation of documentation according to standards; interfaces with client and/or other government personnel; determines appropriate course of action in case of malfunction and confers with and directs staff as warranted.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	8 years
BA/BS	4 years
MA/MS	2 years
Doctorate Degree/Ph.D.	1 years

ANT-071HAC SR Computer Operations Manager

Minimum/General Experience: Must have at least six years' experience, of which at least four years are Security IT **or cybersecurity** specialized. Specialized experience includes: supervision and operations experience on a large-scale computer system, knowledge of hardware, software and operating systems. General experience includes operations experience on a large-scale computer system.

Functional Responsibility: Manages and directs the operations and support of the computer systems and peripheral equipment in large scale or multi-shift operations within a cybersecurity environment ; supervises and directs the work of computer operations personnel; identifies processing requirements and schedules job streams for computer runs; responsible for the security and routing of input and output data, problem isolation and restart/recovery, interpreting technical documentation standards and preparation of documentation according to standards, and interfacing with client and/or government personnel; determines appropriate course of action in case of malfunction and confers with and directs staff as warranted.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	10 years
AA/AS	8 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-076HAC Communications Engineer

Minimum/General Experience: Must have at least six years of general experience with Security IT **or cybersecurity** telecommunications systems including three years of specialized experience.

Functional Responsibility: Provides technical support for telecommunications activities including planning, designing, installing, and maintaining large telecommunications networks within a cybersecurity environment . Develops, operates, and maintains voice, video, and/or data communications systems. Applies telecommunications engineering principles and theory to propose design and configuration alternatives. Evaluates existing communications systems to identify deficiencies and performance improvements. Consults with user personnel to ensure that problems have been properly identified and that the solution will meet the requirements. Analyzes system performance, usage and traffic flows, accesses and interfaces, transmission techniques, and protocols. Performs system analyses and feasibility studies concerning communications and communication networks. Prepares studies and gives presentations on communications concepts. Provides technical guidance to other personnel concerning data communications requirements. Participates in preparing specifications for acquiring commercially available data communications networks.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	10 years
AA/AS	8 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-077HAC SR Communications Engineer

Minimum/General Experience: Must have at least ten years of general experience with Security IT **or cybersecurity** telecommunications systems including four years of specialized experience.

Functional Responsibility: Provides technical direction for telecommunications activities including planning, designing, installing, and maintaining large telecommunications networks within a cybersecurity environment. Develops, operates, and maintains voice, video, and/or data communications systems. Applies telecommunications engineering principles and theory to propose design and configuration alternatives. Evaluates existing communications systems to identify deficiencies and performance improvements. Consults with user personnel to ensure that problems have been properly identified and that the solution will meet the requirements. Analyzes system performance, usage and traffic flows, accesses and interfaces, transmission techniques, and protocols. Performs system analyses and feasibility studies concerning communications and communication networks. Prepares studies and gives presentations on communications concepts. Provides technical guidance to other personnel concerning data communications requirements. Participates in preparing functional specifications for acquiring commercially available data communications networks.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	14 years
AA/AS	12 years
MA/MS	8 years
Doctorate Degree/Ph.D.	7 years

ANT-078HAC JR Network Engineer

Minimum/General Experience: This position requires no experience and requires knowledge of the principles, methods, and techniques used in network administration and engineering plus knowledge of and ability to use relevant hardware, software and other equipment. Certification in specific applications may be required, depending on job assignment.

Functional Responsibility: Performs basic engineering work concerned with the analysis, planning, designing, evaluating, selecting, and upgrading of network systems within a cybersecurity environment; performs various tests and documents results; administers and maintains local and wide area networks; provides technical support and troubleshooting to users; configures systems to user environments; assists in telecommunications activities including planning, designing, installing, and maintaining large telecommunications networks; assists in the maintenance and operation of voice, video, and data communications systems; supports the acquisition of hardware and software as well as subcontractor services as needed.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	4 years
AA/AS	2 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-079HAC Network Engineer

Minimum/General Experience: Must have at least two 2 years' related Security IT **or cybersecurity** network design/administration experience. Also requires knowledge of the principles, methods, and techniques used in network administration and engineering plus knowledge of and ability to use relevant hardware, software and other equipment. Certification in specific applications may be required, depending on job assignment

Functional Responsibility: Analyzes local and wide area network systems, including planning, designing, evaluating, selecting, and upgrading operating systems and protocol suites and configuring communication media with concentrators, bridges, and other devices within a cybersecurity environment; resolves interoperability problems to obtain operations across all platforms including email, file transfer, multimedia, teleconferencing, and the like; configures systems to user requirements; supports the acquisition of hardware and software as well as subcontractor services as needed; performs various tests and documents results; administers and maintains local and wide area networks; provides technical support and troubleshooting to users; plans network layout design; may administer network security.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-080HAC Staff Network Engineer

Minimum/General Experience: Must have at least 5 years' related Security IT **or cybersecurity** network design/administration experience. Also requires knowledge of the principles, methods, and techniques used in network administration and engineering plus knowledge of and ability to use relevant hardware, software and other equipment. Certification in specific applications may be required, depending on job assignment

Functional Responsibility: Analyzes local and wide area network systems, including planning, designing, evaluating, selecting, and upgrading operating systems and protocol suites and configuring communication media with concentrators, bridges, and other devices within a cybersecurity environment; resolves interoperability problems to obtain operations across all platforms including email, file transfer, multimedia, teleconferencing, and the like; configures systems to user requirements; supports the acquisition of hardware and software as well as subcontractor services as needed; performs various tests and documents results; administers and maintains local and wide area networks; provides technical support and troubleshooting to users; plans network layout design; may administer network security; may perform database administration; may provide guidance and training to lower level personnel and serve as technical team or task lead.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-081HAC SR Network Engineer

Minimum/General Experience: Must have at least eight years' related Security IT **or cybersecurity** network design/administration experience. Also must have advanced knowledge of the principles, methods, and techniques used in network administration and engineering plus advanced knowledge of and ability to use relevant hardware, software and other equipment is required.

Functional Responsibility: Analyzes local and wide area network systems, including planning, designing, evaluating, selecting, and upgrading operating systems and protocol suites and configuring communication media with concentrators, bridges, and other devices within a cybersecurity environment; resolves interoperability problems to obtain operations across all platforms including email, file transfer, multimedia, teleconferencing, and the like; configures systems to user requirements; supports the acquisition of hardware and software as well as subcontractor services as needed; performs various tests and documents results; administers and maintains local and wide area networks; provides technical support and troubleshooting to users; plans network layout design; may administer network security; may perform database administration; may supervise and direct the work of lower level personnel; may serve as technical team or task lead.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	14 years
AA/AS	12 years
BA/BS	10 years
Doctorate Degree/Ph.D.	7 years

ANT-082HAC Principal Network Engineer

Minimum/General Experience: Must have at least ten years' related Security IT **or cybersecurity** network design/administration experience. Expert knowledge of the principles, methods, and techniques used in network administration and engineering plus expert knowledge of and ability to use relevant hardware, software and other equipment is required.

Functional Responsibility: Provides expert level analysis of local and wide area network systems, including planning, designing, evaluating, selecting, and upgrading operating systems and protocol suites and configuring communication media with concentrators, bridges, and other devices within a cybersecurity environment; resolves interoperability problems to obtain operations across all platforms including email, file transfer, multimedia, teleconferencing, and the like; configures systems to user requirements; supports the acquisition of hardware and software as well as subcontractor services as needed; directs various testing and the documentation of results; plans network layout design; may administer network security; may perform database administration; may supervise and direct the work of lower level personnel; serves as technical team or task lead.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	16 years
AA/AS	14 years
BA/BS	12 years
Doctorate Degree/Ph.D.	9 years

ANT-083HAC Network Administrator

Minimum/General Experience: Requires at least seven years' experience. Also requires knowledge of the principles, methods, and techniques used in Security IT

or cybersecurity network troubleshooting and support as well as knowledge of operating systems and applications and network management. Must have working knowledge of current technologies and products for Web services and security.

Functional Responsibility: Supports, installs, maintains, troubleshoots, and coordinates the usage of local and wide area networks (LAN and WAN), electronic mail, telecommunications, and PC based systems and related software within a cybersecurity environment; evaluates hardware and software, including peripheral, output, and telecommunications equipment; sets up and administers security procedures; troubleshoots problems; recommends and implements LAN policies and procedures and ensures adherence to security procedures; trains users on LAN operations and procedures.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
MA/MS	5 years
Doctorate Degree/Ph.D.	4 years

ANT-084HAC SR Network Administrator

Minimum/General Experience: Requires eight years' of experience. Also requires knowledge of the principles, methods, and techniques used in Security IT **or cybersecurity** network troubleshooting and support, operating systems and applications and network management. Must have working knowledge of current technologies and products for Web services and security.
Functional Responsibility: Responsible for the planning, design, acquisition, installation, and maintenance of LAN and WAN, electronic mail, telecommunications, and PC based systems and related software within a cybersecurity environment ; evaluates hardware and software, including peripheral, output, and telecommunications equipment; sets up and administers security procedures; troubleshoots problems; establishes and implements LAN policies and their conformance; coordinates activities of LAN support personnel, providing guidance on common networking issues; assesses vendor products; manages network performance, troubleshoots problems, and maintains network security.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-088HAC Network/Computer Support Specialist

Minimum/General Experience: Must have at least three years directly related experience in Security IT **or cybersecurity** network support. Requires advanced knowledge of the following: principles, methods, and techniques used in network troubleshooting and support; modems, data scopes, patch panels, concentrators, associated terminals, and network management software; Desk Top Operating Systems and Applications. Certification in one or more specific application(s) may be required, depending on job assignment.

Functional Responsibility Installs, configures, and upgrades computer hardware; provides end-user software troubleshooting and support within a cybersecurity environment ; provides network troubleshooting and support; diagnoses hardware, software and operator problems and corrects them; analyzes IT infrastructure processes and makes recommendations for improvement; involved in IT infrastructure planning; recommends Business Process improvements; leads deployment activities; may provide end-user training; involved in the development of larger Business Applications and Exchange, Web Applications, and Virus Software implementation; may supervise Network/Computer Support Technicians.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	7 years
AA/AS	5 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-089HAC Computer System/Network Integration Engineer

Minimum/General Experience: Received certification level training in proprietary product network operating system or integration tools and at least one year experience in Security IT **or cybersecurity** computer system/network engineering and/or technical subject specialization, or; 4 or more years experience in computer system/network engineer and/or technical subject specialization. Two more years experience within a specific field of technology related to computer systems integration/network integration administration or security and/or a specific technical subject specialization.

Functional Responsibility: Performs system and network analysis, design and administration within a cybersecurity environment. Designs computer and communications architectures, provides timely technical support, and designs hardware/software solutions for communications architectures.

ANT-092HAC SR Telecommunications Analyst

Minimum/General Experience: Most have at least three years' directly related experience in Security IT **or cybersecurity** telecommunications systems design and support. Must also have advanced knowledge of the fundamental concepts used in telecommunications systems administration and support as well as relevant hardware and software systems.

Functional Responsibility: Evaluates, designs, and maintains existing or proposed telecommunications systems within a cybersecurity environment; analyzes the telecommunications needs of the user and recommends solutions; designs, develops, and tests telecommunications software solutions; prepares detailed specifications and flow charts for implementation of new internal programs or modification to vendor software; coordinates installation of equipment; monitors the operations of telecommunications systems and services of vendors; provides end user training of telecommunications features and functionality; may provide guidance and technical training to lower level analysts.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	5 years
BA/BS	1 year
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-093HAC Communications Network Manager

Minimum/General Experience: Must have at least six years' experience, of which at least three years are specialized. Specialized experience includes: supervising the operation and maintenance of Security IT **or cybersecurity** communications network systems. General experience includes all aspects of communications networks.

Functional Responsibility: Schedules conversions and cutovers. Oversees network control center within a cybersecurity environment. Supervises maintenance of systems. Coordinates with all responsible users and sites. Supervises staff.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	10 years
AA/AS	8 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-102HAC Hardware Specialist

Minimum/General Experience: Must have at least five years' progressive experience in systems analysis with three years' intensive and progressive specific experience in the specialty.

Functional Responsibility: Determines feasible hardware alternatives in client server cybersecurity environments. Reviews computer systems in terms of capabilities and makes recommendations for improved utilization. Prepares or directs preparation of reports concerning hardware. Prepares or participates in preparing functional requirements and specifications for hardware acquisitions.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-103HAC Quality Assurance/IV&V Analyst

Minimum/General Experience: Must have at least two years' related experience in Security IT **or cybersecurity** quality assurance and/or software engineering. Must also have experience with Independent Validation and Verification (IV&V) and system configuration.

Functional Responsibility: Assists in the review and evaluation of software products and systems to ensure adherence to customer quality standards within a cybersecurity environment; develops software/systems testing procedures and conducts tests; analyzes and documents IV&V issues; presents IV&V results; works under general supervision.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-104HAC Quality Assurance/IV&V Specialist

Minimum/General Experience: Must have at least four years' experience of which two years must be specialized. Specialized experience includes: Security IT **or cybersecurity** Configuration Management, IV&V, software testing and integration, software metrics and their application to software quality assessment. General

experience includes increasing responsibilities in quality assurance, quality control and IV&V.

Functional Responsibility: Assists in the evaluation of software and associated documentation within a cybersecurity environment . Participates in formal and informal reviews to determine quality; presents IV&V results and troubleshoots technical problems; makes recommendations to improve overall quality.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	8 years
AA/AS	6 years
MA/MS	2 years
Doctorate Degree/Ph.D.	1 years

ANT-105HAC Quality Assurance/IV&V Manager

Minimum/General Experience: Must have at least seven years of Security IT **or cybersecurity** engineering and/or system analysis and programming experience, including four years of quality assurance, IV&V or system configuration experience.

Functional Responsibility: Organizes and maintains all quality assurance and IV&V documentation required within a cybersecurity environment . Responsible for ensuring compliance with recognized standards and practices. Reviews all documentation for completeness, accuracy, and correctness. Supports the test and integration personnel as a witness to testing requirements; presents IV&V results and troubleshoots technical problems; makes recommendations to improve overall quality. Certifies that deliverables have met all quality requirements.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
MA/MS	5 years
Doctorate Degree/Ph.D.	4 years

ANT-108HAC Configuration Management Specialist

Minimum/General Experience: Must have five years of engineering and/or Security IT **or cybersecurity** system analysis and programming experience, including two years of configuration management experience.

Functional Responsibility: Responsible for configuration management activities including product identification, change control, status accounting, operation of the program support library, and development and monitoring of equipment/system acceptance plans within a cybersecurity environment. Evaluates and selects configuration management tools and standards. Coordinates with users and systems development personnel on releases of both system-level software and applications software. Verifies the completeness and accuracy of release libraries before implementation and ensures that correct versions of programs are included in specified releases. Prepares configuration management plans and procedures. Responsible for configuration management of requirements, design, and code. Operates and manages program support library. Monitors library structure and procedures to assure system integrity, including procedures for collection, release, production, test, and emergency libraries and the movement/migration of components between libraries. Monitors end-item acceptance plans. Will supervise lower level personnel. Must have demonstrated capability for oral and written communications.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-109HAC SR Configuration Management Specialist

Minimum/General Experience: Must have at least seven years' directly related experience in Security IT **or cybersecurity** configuration management and support. Must also have advanced knowledge of the principles, methods, and techniques used in configuration management and support as well as knowledge and familiarity with Configuration Management software support packages commonly utilized in project management. Must be able to supervise and direct the work of others and have the ability to serve as a technical team or task lead.

Functional Responsibility: Conducts periodic site inventory in order to create and maintain inventories of equipment, software, and/or systems; prepares, maintains and inventories associated technical drawings for assigned projects within a cybersecurity environment; researches data, and creates and maintains inventory and other databases for assigned projects; prepares configuration change requests and verifies, tracks, and documents configuration changes; performs logistic-related tasks like shipping/receiving, tracking, and disposal of equipment, software, and/or systems; coordinates equipment/software utilization among individual users; provides documentation support for assigned projects; performs quality assurance checks on drawings prepared by other configuration management specialists; may serve as a team or task lead; may

supervise and direct the work of other configuration management specialists; provides training on configuration management processes, software, and/or systems.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
MA/MS	5 years
Doctorate Degree/Ph.D.	4 years

ANT-111HAC Training Specialist/Instructor

Minimum/General Experience: Must have four years' experience in Security IT **or cybersecurity** information systems development, training, or related fields. Must have two years specialized experience. Specialized experience includes: experience in developing and providing IT and end-user training on computer hardware and application software. General experience includes information systems development, training, or related fields. Demonstrated ability to communicate orally and in writing.

Functional Responsibility: Conducts the research necessary to develop and revise training courses within a cybersecurity environment. Develops and revises these courses and prepares appropriate training catalogs. Prepares all instructor materials (course outline, background material, and training aids). Prepares all student materials (course manuals, workbooks, handouts, completion certificates, and course critique forms). Trains personnel by conducting formal classroom courses, workshops and seminars.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	8 years
AA/AS	6 years
MA/MS	2 years
Doctorate Degree/Ph.D.	1 years

ANT-112HAC SR Training Specialist/Instructor

Minimum/General Experience: Must have six years' experience in Security IT **or cybersecurity** information systems development, training, or related fields, with at least three years experience developing and providing IT and end-user training on computer hardware and application software.

Functional Responsibility: Conducts the research necessary to develop and revise training courses and prepares appropriate training catalogs within a cybersecurity environment . Prepares all instructor materials (course outline, background material, and training aids). Prepares all student materials (course manuals, workbooks, handouts, completion certificates, and course critique forms). Trains personnel by conducting formal classroom courses, workshops, and seminars. Provides daily supervision and direction to staff.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	10 years
AA/AS	8 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-114HAC Training Specialist

Minimum/General Experience: Requires at least three years' directly related experience in the design and development of Security IT **or cybersecurity** training programs. Also requires knowledge of the principles, methods, and techniques used in the design and development of computer-based training programs as well as relevant hardware/software and computer equipment as required. Must be able to present training programs to users and serve as a technical team led.

Functional Responsibility: Designs training objectives; develops computer-based training programs for assigned software within a cybersecurity environment; designs courseware and structures training classes; creates lesson text; provides documentation for software training; designs program authoring systems; creates final version of training programs; presents training programs to users; designs program flowcharts; may serve as a team lead.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	5 years
BA/BS	1 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-115HAC SR Training Specialist

Minimum/General Experience: Requires at least seven years' directly related experience in the design, development, testing, and implementation of computer-based Security IT **or cybersecurity** training programs. Also requires thorough knowledge of the principles, methods, and techniques used in the design, development, testing, and implementation of computer-based training programs; knowledge of relevant hardware/software and computer equipment as required.

Must be able to present training programs and evaluate effectiveness of training and serve as a team or task lead.

Functional Responsibility: Defines training requirements and analyzes system software changes within a cybersecurity environment; develops computer-based training objectives and methodologies; coordinates with subject matter experts to design training strategy; designs courseware, including structuring training classes; creates lesson text; provides documentation for software training; tests training programs and edits for effectiveness, creates final version; designs program authoring systems; presents training programs to users, validates and evaluates training effectiveness; designs program flowcharts; may develop multi-media training as required; conducts research into new training, educational, and multimedia technologies; may serve as a team or task lead.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	9 years
BA/BS	5 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-116HAC Principal Training Specialist

Minimum/General Experience: Requires at lest ten years' related experience in Security IT **or cybersecurity** instructional development. Also requires advanced knowledge of the principles, methods, and techniques used in technology-based training as well as the use and application of off-the-shelf tools and associated equipment and systems.

Functional Responsibility: Designs and develops instructional approaches and/or strategies to meet training requirements within a cybersecurity environment; conducts analysis of training requirements and media requirements; develops appropriate training objectives and test methods and designs instructionally valid training materials; ensures integrity of task analysis, training requirements, training hierarchies, instructional materials, and evaluation plans; designs and develops computer-based training, web-based training, electronic performance support systems and other technology-based learning solutions; develops flow diagrams and story boards; designs instructionally sound lessons in a variety of delivery media; interacts with customer and subject matter experts to ensure technical accuracy of instructional content. Also provides guidance and work leadership to lower-level personnel and may serve as technical team or task lead.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	12 years
BA/BS	8 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-119HAC Testing and Validation Specialist

Minimum/General Experience: Requires no experience and knowledge of the principles, methods, and techniques used in analysis and assessment as well as the use and application of related off-the-shelf tools.

Functional Responsibility: Designs and develops assessment instruments and/or strategies to meet training requirements within a cybersecurity environment ; conducts analysis of training requirements (needs, job, task analysis); interviews subject matter experts or incumbents to collect information; develops relevant and measurable assessment criteria, standards, and methodologies; designs reliable and valid assessment materials; gathers data and compiles information into documents related to assessment.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	4 years
AA/AS	2 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-121HAC Principal Testing and Validation Specialist

Minimum/General Experience: Requires at least five years' related experience in Security IT **or cybersecurity** educational psychology, industrial/organizational psychology, testing, psychometrics, or instructional media/technology. Also requires advanced knowledge of the principles, methods, and techniques used in analysis and assessment as well as the use and application of related off-the-shelf tools. Must have the ability to provide work leadership and supervision to assigned staff.

Functional Responsibility: Designs and develops assessment instruments and/or strategies to meet training requirements within a cybersecurity environment; conducts analysis of training requirements (needs, job, task analysis); interviews subject matter experts or incumbents to collect information; develops relevant and measurable assessment criteria, standards, and methodologies; designs reliable and valid assessment materials; prepares reports and technical documentation related to assessment; works on complex analysis or test development projects. Serves as a technical team/task lead and may have supervisory responsibility.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
BA/BS	7 years
Doctorate Degree/Ph.D.	4 years

ANT-123HAC Instructional System Designer

Minimum/General Experience: Requires at least two years' related experience in Security IT **or cybersecurity** instructional development. Also requires knowledge of the principles, methods, and techniques used in technology-based training as well as the use and application of off-the-shelf tools and associated equipment and systems.

Functional Responsibility: Designs and develops instructional approaches and/or strategies to meet training requirements within a cybersecurity environment; conducts analysis of training requirements and media requirements; develops appropriate training objectives and test methods and designs instructionally valid training materials; ensures integrity of task analysis, training requirements, training hierarchies, instructional materials, and evaluation plans; designs and develops computer based training, web-based training, electronic performance support systems and other technology-based learning solutions; develops flow diagrams and story boards; designs instructionally sound lessons in a variety of delivery media; interacts with customer and subject matter experts to ensure technical accuracy of instructional content.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-124HAC SR Instructional System Designer

Minimum/General Experience: Requires at least five years' related experience in Security IT **or cybersecurity** instructional development as well as thorough knowledge of the principles, methods, and techniques used in technology-based training and use and application of off-the-shelf tools and associated equipment and systems.

Functional Responsibility: Designs and develops instructional approaches and/or strategies to meet training requirements within a cybersecurity environment; conducts analysis of training requirements and media requirements; develops appropriate training objectives and test methods and designs instructionally valid training materials; ensures integrity of task analysis, training requirements, training hierarchies, instructional materials, and evaluation plans; designs and develops computer based training, web-based training, electronic performance support systems and other technology-based learning solutions; develops flow diagrams and story boards; designs instructionally sound lessons in a variety of delivery media; interacts with customer and subject matter experts to ensure technical accuracy of instructional content; may provide guidance and work leadership to lower-level personnel.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
BA/BS	7 years
Doctorate Degree/Ph.D.	4 years

ANT-128HAC Staff Graphics Design Specialist

Minimum/General Experience: Requires at least five years' directly related experience in graphics design. Also requires knowledge of the principles, methods, and techniques used in the preparation of graphics material and associated software and equipment. Requires experience using graphics software programs.

Functional Responsibility: Performs a wide variety of graphics/illustration activities to produce brochures, briefings, displays, and other materials within a cybersecurity environment; involved in all aspects of graphics/illustration projects from conceptualization and development to final presentation; may act as a technical consultant on matters of design, composition and methods of presenting technical data; uses a broad range of graphics production software and equipment; exercises creative judgment and originality by translating needs into graphics capabilities; may participate in website design.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	7 years
BA/BS	3 years
MA/MS	1 years
Doctorate Degree/Ph.D.	0 years

ANT-129HAC SR Graphics Design Specialist

Minimum/General Experience: Requires at least eight years' directly related experience in graphics design. Knowledge of the principles, methods, and techniques used in the preparation of graphics materials as well as knowledge of the associated software and equipment and in-depth knowledge of graphics software programs.

Functional Responsibility: Performs high-level computer graphic design activities to produce brochures, briefings, displays, and other materials within a cybersecurity environment; involved in all aspects of graphics/illustration projects from conceptualization and development to final presentation; may act as a technical consultant on matters of design, composition and methods of presenting technical data; uses a broad range of graphics production software and equipment; exercises creative judgment and originality by translating needs into graphics capabilities; may participate in website design; provides technical training and guidance to lower-level graphics personnel and may act as a team or task lead.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	10 years
BA/BS	6 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-130HAC Principal Graphics Design Specialist

Minimum/General Experience: Requires at least nine years' directly related experience in graphics design. Also requires knowledge of the principles, methods, and techniques used in the preparation of graphics materials and associated software and equipment and an in-depth knowledge of graphics software programs. Requires the ability to supervise and direct the work of others.

Functional Responsibility: Provides full supervision and training for graphic design personnel, directing the production of graphics projects from design through final presentation within a cybersecurity environment; acts as a technical consultant on matters of design, composition and methods of presenting technical data; uses a broad range of graphics production software and equipment; exercises creative judgment and originality by translating needs into graphics capabilities; may participate in website design; acts as a team or task lead.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	11 years
BA/BS	7 years
MA/MS	5 years
Doctorate Degree/Ph.D.	4 years

ANT-133HAC Contract Administrator

Minimum/General Experience: Requires at least two years' related experience in Security IT **or cybersecurity** contracts administration. Also requires thorough knowledge of the practices, procedures, and processes of contracts administration as well as relevant laws, regulations, terms, conditions, and policies governing assigned contracts.

Functional Responsibility: Performs all duties of contract administration, including negotiation, correspondence, documentation, certification, financial reporting, and product delivery; implements subcontract administration procedures within a cybersecurity environment; negotiates contract terms from proposal stage to project close-out in accordance with relevant regulations; prepares and submits proposals including pricing and scheduling details and coordination of requirements; prepares consulting agreements; modifies contract schedules and participates in vendor reseller agreement negotiations when required; ensures timely processing of technical reports and deliverables; collects data for clients as requested

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-134HAC SR Contract Administrator

Minimum/General Experience: Requires at least five years' related experience in Security IT **or cybersecurity** contracts administration. Also requires advanced knowledge of the practices, procedures, and processes of contracts administration as well as thorough knowledge of relevant laws, regulations, terms, conditions, and policies governing assigned contracts including Federal Acquisition Regulations (FAR) and labor law.

Functional Responsibility: Performs all duties of contract administration, including negotiation, correspondence, documentation, certification, financial reporting, and product delivery for complex contracts within a cybersecurity environment; implements subcontract administration procedures; negotiates contract terms from proposal stage to project close-out in accordance with relevant regulations; coordinates approval of negotiations, contracts, and subcontracts with appropriate management staff; provides advice and interpretation of contract requirements; reviews solicitation requests to ensure compliance with terms and conditions; prepares and submits cost proposals including pricing and scheduling details, coordination of requirements, and cost proposal risk assessment; prepares responses to certifications and representations; prepares consulting agreements; modifies contract schedules and participates in vendor reseller agreement negotiations when required; ensures timely processing of technical reports and

deliverables; coordinates with program managers to ensure contract requirements are fulfilled; collects data for clients as requested; may provide work leadership to lower level contracts personnel.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-137HAC Program Management Specialist

Minimum/General Experience: Requires at least three years' related administrative Security IT **or cybersecurity** experience. Also requires demonstrated effective organizational skills and knowledge of word processing, spreadsheet, and/or other pertinent software applications.

Functional Responsibility: Responsible for management, performance and completion of cybersecurity projects associated with a contract program; collects and evaluates data for monitoring development and life-cycle requirements of various programs and systems; creates program cost estimates to support program cost/schedule/technique audits or to generate budget submissions; manages program staff; prepares management plans, budgets and schedules; uses and develops CPM and PERT evaluation techniques; uses computer programs and models to track program data; maintains contact with customer to ensure conformance to customer requirements.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	7 years
AA/AS	5 years
MA/MS	1 years
Doctorate Degree/Ph.D.	0 years

ANT-138HAC SR Program Management Specialist

Minimum/General Experience: Requires at least six years' related administrative Security IT **or cybersecurity** experience. Also requires demonstrated effective organizational skills and knowledge of word processing, spreadsheet, and/or other pertinent software applications.

Functional Responsibility: Responsible for management, performance and completion of significant cybersecurity projects associated with a contract program; collects and evaluates data for monitoring development and life-cycle requirements of various programs and systems; creates program cost estimates to support program cost/schedule/technique audits or to generate budget submissions; manages and coordinates projects of considerable scope and magnitude; manages program staff; oversees the development of design concepts and test criteria; prepares management plans, budgets and schedules; uses and develops CPM and PERT evaluation techniques; uses computer programs and models to track program data; maintains contact with customer to ensure conformance to customer requirements.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	10 years
AA/AS	8 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-139HAC Principal Program Management Specialist

Minimum/General Experience: Requires at least eight years' related administrative Security IT **or cybersecurity** experience. Also requires demonstrated management and organizational skills and knowledge of word processing, spreadsheet, and/or other pertinent software applications.

Functional Responsibility: Responsible for management, performance and completion of major cybersecurity projects associated with a contract program; collects and evaluates data for monitoring development and life-cycle requirements of various programs and systems; creates program cost estimates to support program cost/schedule/technique audits or to generate budget submissions; manages and directs, with full authority, all phases of a program from inception to completion; manages program staff; oversees the development of design concepts and test criteria; reviews project and program schedules and plans and reports on alternative courses of action and potential impacts; directs, prepares and coordinates proposal preparation, management plans, budgets and schedules; uses and develops CPM and PERT evaluation techniques; uses computer programs and models to track program data; maintains contact with customer to ensure conformance to customer requirements.
Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-147HAC Documentation Specialist

Minimum/General Experience: Must have two years' experience in composing and producing technical documentation or one year experience in composing and producing technical documentation plus a college degree.

Functional Responsibility: Composes and finalizes technical cybersecurity documentation including specifications, user manuals, etc. in the style, content and format required by the relevant standards using input received from technical personnel.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	4 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-148HAC SR Documentation Specialist

Minimum/General Experience: Requires at least eight years' directly related experience in the research, preparation, and writing of technical and marketing materials. Also requires thorough knowledge of the principles and practices of technical research, writing, and editing as well as word-processing, desk-top publishing, and web applications and computer equipment.

Functional Responsibility: Collects and organizes cybersecurity information required for preparation of user's manuals, training materials, installation guides, and reports at a complex level; researches and learns the assigned system; interviews key personnel; writes materials; performs detailed edits of contract deliverables, proposals, brochures, press releases, and other materials to ensure technical accuracy, consistency, and adherence to specified content and format; participates in the writing, design, and development of marketing brochures, advertisements, news releases, feature articles, conference programs and proceedings, public relations announcements, newsletters, and other materials; designs, develops, produces, maintains, and manages client web sites as assigned; rewrites technical materials and coordinates with technical personnel to ensure accuracy; compiles and collects information for the preparation of technical proposals;
Creates multi-media presentation materials, including slides; may participate in the coordination of and attend various conferences and meetings; may serve as a team lead.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	10 years
BA/BS	6 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-150HAC Technical Editor

Minimum/General Experience: Must have at least five years' directly related experience in the research and preparation of technical materials. Also requires knowledge of the principles and practices of technical research, writing, and editing, as well as word-processing and desktop publishing applications and computer equipment as required.

Functional Responsibility: Prepares and edits a wide variety of complex technical materials within cybersecurity for publication, including user's manuals, training materials, installation guides, proposals, and reports; reviews, researches, and edits information for preparation of contract deliverables; provides support to the creation of proposals and multi-media presentation materials, including slides; responsible for the coordination of multiple aspects of document publication; participates in the design and development of marketing brochures, conference programs and proceedings, public relations announcements, and other materials when requested; may supervise and direct the work of word processing, graphics and/or technical writing staff; coordinates and attends various conferences and meetings; plans budgets, schedules and priority of work for publications projects.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

HIGHLY ADAPTIVE CYBERSECURITY SERVICES - RATES
Service Rates Applicable for SIN 54151HACS

Cat #	Category Name	Contract Year 5 GSA Price with IFF (11/21/18 to 11/20/19)	Contract Year 6 GSA Price with IFF (11/21/19 to 11/20/20)	Contract Year 7 GSA Price with IFF (11/21/20 to 11/20/21)	Contract Year 8 GSA Price with IFF (11/21/21 to 11/20/22)	Contract Year 9 GSA Price with IFF (11/21/22 to 11/20/23)	Contract Year 10 GSA Price with IFF (11/21/23 to 11/20/24)
ANT-001HAC	Technical Expert 5	$ 102.75	$ 104.94	$ 107.19	$ 109.48	$ 111.83	$ 114.22
ANT-002HAC	Technical Expert 4	$ 116.60	$ 119.09	$ 121.64	$ 124.24	$ 126.90	$ 129.62
ANT-003HAC	Technical Expert 3	$ 168.37	$ 171.97	$ 175.65	$ 179.41	$ 183.25	$ 187.17
ANT-004HAC	Technical Expert 2	$ 206.61	$ 211.03	$ 215.54	$ 220.16	$ 224.87	$ 229.68
ANT-005HAC	Technical Expert 1	$ 304.54	$ 311.06	$ 317.72	$ 324.52	$ 331.46	$ 338.56
ANT-006HAC	Project Manager/Task Lead	$ 124.61	$ 127.28	$ 130.00	$ 132.79	$ 135.63	$ 138.53
ANT-007HAC	Program Manager	$ 136.72	$ 139.64	$ 142.63	$ 145.68	$ 148.80	$ 151.98
ANT-008HAC	Sr. Program Manager	$ 167.36	$ 170.94	$ 174.60	$ 178.34	$ 182.15	$ 186.05
ANT-009HAC	Proprietary Prod Application Developer	$ 120.25	$ 122.82	$ 125.45	$ 128.13	$ 130.88	$ 133.68
ANT-010HAC	Proprietary Prod Application Designer	$ 120.25	$ 122.82	$ 125.45	$ 128.13	$ 130.88	$ 133.68
ANT-011HAC	Proprietary Prod Database Admin	$ 115.85	$ 118.33	$ 120.86	$ 123.45	$ 126.09	$ 128.79
ANT-012HAC	Proprietary Prod System Architect	$ 117.42	$ 119.93	$ 122.50	$ 125.12	$ 127.80	$ 130.53
ANT-013HAC	Business Process Reengineering Analyst	$ 99.37	$ 101.49	$ 103.67	$ 105.88	$ 108.15	$ 110.46
ANT-015HAC	Scientist	$ 89.51	$ 91.42	$ 93.38	$ 95.38	$ 97.42	$ 99.50
ANT-016HAC	Staff Scientist	$ 114.70	$ 117.15	$ 119.66	$ 122.22	$ 124.83	$ 127.50
ANT-017HAC	Sr. Scientist	$ 137.49	$ 140.44	$ 143.44	$ 146.51	$ 149.65	$ 152.85
ANT-018HAC	Principal Scientist	$ 168.23	$ 171.83	$ 175.51	$ 179.26	$ 183.10	$ 187.02
ANT-019HAC	Sr. Principal Scientist	$ 195.16	$ 199.33	$ 203.60	$ 207.96	$ 212.41	$ 216.95
ANT-023HAC	Jr. Systems Engineer	$ 76.89	$ 78.54	$ 80.22	$ 81.93	$ 83.69	$ 85.48
ANT-024HAC	Systems Engineer	$ 93.49	$ 95.49	$ 97.53	$ 99.62	$ 101.75	$ 103.93
ANT-025HAC	Staff Systems Engineer	$ 115.17	$ 117.64	$ 120.16	$ 122.73	$ 125.35	$ 128.04
ANT-026HAC	Sr. Systems Engineer	$ 122.43	$ 125.05	$ 127.73	$ 130.46	$ 133.25	$ 136.10
ANT-027HAC	Principal Systems Engineer	$ 128.88	$ 131.64	$ 134.46	$ 137.34	$ 140.28	$ 143.28
ANT-028HAC	Sr. Principal Systems Engineer	$ 172.79	$ 176.49	$ 180.27	$ 184.12	$ 188.06	$ 192.09
ANT-029HAC	Information Engineer	$ 117.42	$ 119.93	$ 122.50	$ 125.12	$ 127.80	$ 130.53
ANT-030HAC	Sr. Information Engineer	$ 129.59	$ 132.36	$ 135.20	$ 138.09	$ 141.04	$ 144.06
ANT-031HAC	Principal Information Engineer	$ 153.77	$ 157.06	$ 160.42	$ 163.86	$ 167.36	$ 170.94
ANT-032HAC	Jr. Software Engineer	$ 74.47	$ 76.06	$ 77.69	$ 79.35	$ 81.05	$ 82.79
ANT-033HAC	Software Engineer	$ 87.46	$ 89.33	$ 91.24	$ 93.20	$ 95.19	$ 97.23
ANT-034HAC	Staff Software Engineer	$ 98.56	$ 100.67	$ 102.83	$ 105.03	$ 107.28	$ 109.57
ANT-035HAC	Sr. Software Engineer	$ 123.04	$ 125.67	$ 128.36	$ 131.11	$ 133.91	$ 136.78
ANT-036HAC	Principal Software Engineer	$ 172.48	$ 176.17	$ 179.94	$ 183.79	$ 187.73	$ 191.74
ANT-037HAC	Software Architect	$ 161.09	$ 164.54	$ 168.06	$ 171.66	$ 175.33	$ 179.08
ANT-038HAC	Computer Security Specialist	$ 98.07	$ 100.17	$ 102.32	$ 104.51	$ 106.74	$ 109.03
ANT-039HAC	Sr. Computer Security Specialist	$ 138.02	$ 140.97	$ 143.99	$ 147.07	$ 150.22	$ 153.43
ANT-040HAC	Jr. Database Architect	$ 78.59	$ 80.27	$ 81.99	$ 83.74	$ 85.53	$ 87.36
ANT-041HAC	Database Architect	$ 87.36	$ 89.22	$ 91.13	$ 93.08	$ 95.08	$ 97.11
ANT-042HAC	Sr. Database Architect	$ 110.47	$ 112.83	$ 115.25	$ 117.72	$ 120.23	$ 122.81
ANT-045HAC	Computer Programmer/Analyst	$ 78.71	$ 80.39	$ 82.11	$ 83.87	$ 85.66	$ 87.50
ANT-046HAC	Staff Computer Programmer/Analyst	$ 110.69	$ 113.06	$ 115.48	$ 117.95	$ 120.47	$ 123.05
ANT-047HAC	Sr. Computer Programmer/Analyst	$ 114.30	$ 116.75	$ 119.25	$ 121.80	$ 124.41	$ 127.07
ANT-048HAC	Principal Computer Programmer/Analyst	$ 134.29	$ 137.17	$ 140.10	$ 143.10	$ 146.16	$ 149.29
ANT-049HAC	Computer Systems Programmer	$ 106.10	$ 108.37	$ 110.69	$ 113.06	$ 115.47	$ 117.95
ANT-050HAC	Web Designer	$ 77.77	$ 79.44	$ 81.14	$ 82.87	$ 84.64	$ 86.46
ANT-051HAC	Web Developer	$ 90.55	$ 92.48	$ 94.46	$ 96.48	$ 98.55	$ 100.66
ANT-052HAC	Sr. Web Developer	$ 123.30	$ 125.94	$ 128.63	$ 131.39	$ 134.20	$ 137.07
ANT-053HAC	Web Tech Administrator	$ 89.15	$ 91.05	$ 93.00	$ 94.99	$ 97.02	$ 99.10
ANT-054HAC	Web Content Manager	$ 87.28	$ 89.14	$ 91.05	$ 93.00	$ 94.99	$ 97.02
ANT-055HAC	Web Security Administrator	$ 87.44	$ 89.31	$ 91.22	$ 93.17	$ 95.17	$ 97.20
ANT-057HAC	Computer Systems Analyst	$ 87.85	$ 89.73	$ 91.65	$ 93.61	$ 95.62	$ 97.66

Cat #	Category Name	Contract Year 5 GSA Price with IFF (11/21/18 to 11/20/19)	Contract Year 6 GSA Price with IFF (11/21/19 to 11/20/20)	Contract Year 7 GSA Price with IFF (11/21/20 to 11/20/21)	Contract Year 8 GSA Price with IFF (11/21/21 to 11/20/22)	Contract Year 9 GSA Price with IFF (11/21/22 to 11/20/23)	Contract Year 10 GSA Price with IFF (11/21/23 to 11/20/24)
ANT-058HAC	Staff Computer Systems Analyst	$ 102.80	$ 105.00	$ 107.25	$ 109.54	$ 111.89	$ 114.28
ANT-059HAC	Sr. Computer Systems Analyst	$ 117.54	$ 120.05	$ 122.62	$ 125.24	$ 127.92	$ 130.66
ANT-060HAC	Principal Computer Systems Analyst	$ 142.03	$ 145.07	$ 148.17	$ 151.34	$ 154.58	$ 157.89
ANT-061HAC	Legacy Systems Analyst	$ 116.50	$ 118.99	$ 121.54	$ 124.14	$ 126.80	$ 129.51
ANT-062HAC	Jr. Functional Analyst/Specialist	$ 65.31	$ 66.71	$ 68.14	$ 69.59	$ 71.08	$ 72.60
ANT-063HAC	Functional Analyst/Specialist	$ 77.25	$ 78.90	$ 80.59	$ 82.32	$ 84.08	$ 85.88
ANT-064HAC	Sr. Functional Analyst/Specialist	$ 99.37	$ 101.49	$ 103.67	$ 105.88	$ 108.15	$ 110.46
ANT-065HAC	Principal Functional Analyst/Specialist	$ 104.26	$ 106.49	$ 108.77	$ 111.10	$ 113.48	$ 115.91
ANT-066HAC	Sr. Principal Functional Analyst/Specialist	$ 145.05	$ 148.16	$ 151.33	$ 154.56	$ 157.87	$ 161.25
ANT-067HAC	Data Management Specialist	$ 115.85	$ 118.33	$ 120.86	$ 123.45	$ 126.09	$ 128.79
ANT-068HAC	Data Administrator	$ 111.30	$ 113.68	$ 116.11	$ 118.59	$ 121.13	$ 123.72
ANT-069HAC	Data Manager	$ 142.96	$ 146.02	$ 149.15	$ 152.34	$ 155.60	$ 158.93
ANT-070HAC	Computer Operations Manager	$ 86.31	$ 88.16	$ 90.04	$ 91.97	$ 93.94	$ 95.95
ANT-071HAC	Sr. Computer Operations Manager	$ 126.69	$ 129.40	$ 132.17	$ 135.00	$ 137.89	$ 140.84
ANT-076HAC	Communications Engineer	$ 115.67	$ 118.15	$ 120.68	$ 123.26	$ 125.90	$ 128.59
ANT-077HAC	Sr. Communications Engineer	$ 132.50	$ 135.34	$ 138.24	$ 141.19	$ 144.22	$ 147.30
ANT-078HAC	Jr. Network Engineer	$ 77.78	$ 79.45	$ 81.15	$ 82.88	$ 84.66	$ 86.47
ANT-079HAC	Network Engineer	$ 87.04	$ 88.90	$ 90.80	$ 92.75	$ 94.73	$ 96.76
ANT-080HAC	Staff Network Engineer	$ 108.03	$ 110.34	$ 112.70	$ 115.11	$ 117.57	$ 120.09
ANT-081HAC	Sr. Network Engineer	$ 117.59	$ 120.11	$ 122.68	$ 125.30	$ 127.98	$ 130.72
ANT-082HAC	Principal Network Engineer	$ 159.19	$ 162.59	$ 166.07	$ 169.63	$ 173.26	$ 176.97
ANT-083HAC	Network Administrator	$ 100.43	$ 102.58	$ 104.78	$ 107.02	$ 109.31	$ 111.65
ANT-084HAC	Sr. Network Administrator	$ 124.59	$ 127.26	$ 129.98	$ 132.76	$ 135.60	$ 138.51
ANT-088HAC	Network/Computer Support Specialist	$ 82.05	$ 83.80	$ 85.60	$ 87.43	$ 89.30	$ 91.21
ANT-089HAC	Computer System/Network Integ Engin	$ 89.15	$ 91.05	$ 93.00	$ 94.99	$ 97.02	$ 99.10
ANT-092HAC	Sr. Telecommunications Analyst	$ 83.05	$ 84.83	$ 86.64	$ 88.50	$ 90.39	$ 92.33
ANT-093HAC	Communications Network Manager	$ 104.56	$ 106.80	$ 109.08	$ 111.42	$ 113.80	$ 116.24
ANT-102HAC	Hardware Specialist	$ 88.90	$ 90.80	$ 92.75	$ 94.73	$ 96.76	$ 98.83
ANT-103HAC	Quality Assurance/IV&V Analyst	$ 79.61	$ 81.31	$ 83.05	$ 84.83	$ 86.64	$ 88.50
ANT-104HAC	Quality Assurance/IV&V Specialist	$ 82.40	$ 84.16	$ 85.96	$ 87.80	$ 89.68	$ 91.60
ANT-105HAC	Quality Assurance IV&V Manager	$ 133.59	$ 136.45	$ 139.37	$ 142.35	$ 145.39	$ 148.51
ANT-108HAC	Configuration Management Specialist	$ 99.39	$ 101.52	$ 103.69	$ 105.91	$ 108.17	$ 110.49
ANT-109HAC	Sr. Configuration Mgt. Specialist	$ 120.25	$ 122.82	$ 125.45	$ 128.13	$ 130.88	$ 133.68
ANT-111HAC	Training Specialist/Instructor	$ 74.91	$ 76.52	$ 78.15	$ 79.83	$ 81.54	$ 83.28

Cat #	Category Name	Contract Year 5 GSA Price with IFF (11/21/18 to 11/20/19)	Contract Year 6 GSA Price with IFF (11/21/19 to 11/20/20)	Contract Year 7 GSA Price with IFF (11/21/20 to 11/20/21)	Contract Year 8 GSA Price with IFF (11/21/21 to 11/20/22)	Contract Year 9 GSA Price with IFF (11/21/22 to 11/20/23)	Contract Year 10 GSA Price with IFF (11/21/23 to 11/20/24)
ANT-112HAC	Sr. Training Specialist/Instructor	$ 99.23	$ 101.35	$ 103.52	$ 105.74	$ 108.00	$ 110.31
ANT-114HAC	Training Specialist	$ 74.91	$ 76.52	$ 78.15	$ 79.83	$ 81.54	$ 83.28
ANT-115HAC	Sr. Training Specialist	$ 99.12	$ 101.25	$ 103.41	$ 105.63	$ 107.89	$ 110.19
ANT-116HAC	Principal Training Specialist	$ 119.57	$ 122.13	$ 124.75	$ 127.42	$ 130.14	$ 132.93
ANT-119HAC	Testing and Validation Specialist	$ 68.29	$ 69.75	$ 71.25	$ 72.77	$ 74.33	$ 75.92
ANT-121HAC	Principal Testing and Validation Specialist	$ 108.12	$ 110.44	$ 112.80	$ 115.21	$ 117.68	$ 120.20
ANT-123HAC	Instructional System Designer	$ 85.85	$ 87.69	$ 89.57	$ 91.48	$ 93.44	$ 95.44
ANT-124HAC	Sr. Instructional System Designer	$ 102.18	$ 104.37	$ 106.60	$ 108.88	$ 111.21	$ 113.59
ANT-128HAC	Staff Graphic Design Specialist	$ 77.56	$ 79.22	$ 80.91	$ 82.64	$ 84.41	$ 86.22
ANT-129HAC	Sr. Graphic Design Specialist	$ 89.44	$ 91.35	$ 93.31	$ 95.30	$ 97.34	$ 99.43
ANT-130HAC	Principal Graphic Design Specialist	$ 108.12	$ 110.44	$ 112.80	$ 115.21	$ 117.68	$ 120.20
ANT-133HAC	Contract Administrator	$ 77.94	$ 79.61	$ 81.32	$ 83.06	$ 84.83	$ 86.65
ANT-134HAC	Sr. Contracts Administrator	$ 104.56	$ 106.80	$ 109.08	$ 111.42	$ 113.80	$ 116.24
ANT-137HAC	Program Management Specialist	$ 75.63	$ 77.25	$ 78.90	$ 80.59	$ 82.32	$ 84.08
ANT-138HAC	Sr. Program Management Specialist	$ 99.69	$ 101.83	$ 104.01	$ 106.23	$ 108.51	$ 110.83
ANT-139HAC	Principal Program Management Specialist	$ 114.91	$ 117.37	$ 119.88	$ 122.45	$ 125.07	$ 127.75
ANT-148HAC	Sr. Documentation Specialist	$ 93.57	$ 95.57	$ 97.61	$ 99.70	$ 101.84	$ 104.02
ANT-150HAC	Technical Editor	$ 98.00	$ 100.10	$ 102.24	$ 104.43	$ 106.66	$ 108.94

Rates are escalated 2.14% annually

IT PROFESSIONAL SERVICES

IT Services Overview

- Full Range of System Development Life Cycle Services including IRM Planning, Business Process Reengineering, Systems and Information Engineering, System Design and Development, Programming, Software Life Cycle Management, Technical Support and Other IT-related Services
- Full Range of Integration Services including Planning, Development, Installation and Acceptance, Interoperability Verification, System Conversion, User Training, Security
- Full Range of Electronic Commerce (EC)/Electronic Data Interchange (EDI) Support
- Full Range of Network Services including LAN, WAN, MAN Planning, Design, Engineering, Implementation, Testing and Operations
- Full Range of Facility Operation and Management Services
- Full Range of Information Retrieval Services

SIN 54151S - Labor Category Requirements and Descriptions

LABOR CATEGORIES, EDUCATION AND YEARS OF EXPERIENCE

No.	Labor Categories	Education	Years Experience
ANT-001	Technical Expert Level 5	BA/BS	6
ANT-002	Technical Expert Level 4	BA/BS	8
ANT-003	Technical Expert Level 3	MA/MS	10
ANT-004	Technical Expert Level 2	MA/MS	12
ANT-005	Technical Expert Level 1	PhD	15
ANT-006	Project Manager/Task Lead	BA/BS	7
ANT-007	Program Manager	BA/BS	10
ANT-008	Sr. Program Manager	BA/BS	12
ANT-009	Proprietary Product Application Developer	*	*
ANT-010	Proprietary Product Application Designer	*	*
ANT-011	Proprietary Product Database Administrator	*	*
ANT-012	Proprietary Product System Architect	*	*
ANT-013	Business Process Reengineering Analyst	*	*
ANT-015	Scientist	BA/BS	2
ANT-016	Staff Scientist	BA/BS	5
ANT-017	SR Scientist	MA/MS	8
ANT-018	Principal Scientist	MA/MS	10
ANT-019	SR Principal Scientist	PhD	15
ANT-023	JR Systems Engineer	BA/BS	*
ANT-024	Systems Engineer	BA/BS	3
ANT-025	Staff Systems Engineer	BA/BS	6
ANT-026	SR Systems Engineer	BA/BS	8
ANT-027	Principal Systems Engineer	BA/BS	10

No.	Labor Categories	Education	Years Experience
ANT-028	SR Principal Systems Engineer	MA/MS	15
ANT-029	Information Engineer	BA/BS	5
ANT-030	SR Information Engineer	BA/BS	8
ANT-031	Principal Information Engineer	BA/BS	10
ANT-032	JR Software Engineer	BA/BS	*
ANT-033	Software Engineer	BA/BS	2
ANT-034	Staff Software Engineer	BA/BS	3
ANT-035	SR Software Engineer	BA/BS	5
ANT-036	Principal Software Engineer	MA/MS	8
ANT-037	Software Architect	MA/MS	10
ANT-038	Computer Security Specialist	BA/BS	7
ANT-039	SR Computer Security Systems Specialist	BA/BS	10
ANT-040	JR Database Architect	BA/BS	2
ANT-041	Database Architect	BA/BS	3
ANT-042	SR Database Architect	BA/BS	5
ANT-045	Computer Programmer/Analyst	BA/BS	3
ANT-046	Staff Computer Programmer/Analyst	BA/BS	4
ANT-047	SR Computer Programmer/Analyst	BA/BS	5
ANT-048	Principal Computer Programmer/Analyst	BA/BS	8
ANT-049	Computer Systems Programmer	BA/BS	5
ANT-050	Web Designer	BA/BS	2
ANT-051	Web Developer	BA/BS	4
ANT-052	SR Web Developer	BA/BS	8
ANT-053	Web Tech Administrator	BA/BS	4
ANT-054	Web Content Manager	BA/BS	2
ANT-055	Web Security Administrator	BA/BS	4
ANT-057	Computer Systems Analyst	BA/BS	3
ANT-058	Staff Computer Systems Analyst	BA/BS	5
ANT-059	SR Computer Systems Analyst	BA/BS	8
ANT-060	Principal Computer Systems Analyst	BA/BS	10
ANT-061	Legacy System Analyst	*	*
ANT-062	JR Functional Analyst/Specialist	BA/BS	1
ANT-063	Functional Analyst/Specialist	BA/BS	5
ANT-064	SR Functional Analyst/Specialist	BA/BS	7
ANT-065	Principal Functional Analyst/Specialist	MA/MS	8
ANT-066	SR Principal Functional Analyst/Specialist	MA/MS	10
ANT-067	Data Management Specialist	BA/BS	6
ANT-068	Data Administrator	BA/BS	6
ANT-069	Data Manager	BA/BS	7
ANT-070	Computer Operations Manager	AA/AS	6
ANT-071	SR Computer Operations Manager	BA/BS	8
ANT-076	Communications Engineer	BA/BS	6
ANT-077	SR Communications Engineer	BA/BS	10
ANT-078	JR Network Engineer	BA/BS	*
ANT-079	Network Engineer	BA/BS	2
ANT-080	Staff Network Engineer	BA/BS	5
ANT-081	SR Network Engineer	MA/MS	8
ANT-082	Principal Network Engineer	MA/MS	10
ANT-083	Network Administrator	BA/BS	7
ANT-084	SR Network Administrator	BA/BS	8
ANT-088	Network/Computer Support Specialist	BA/BS	3
ANT-089	Computer System/Network Integration Engineer	*	*
ANT-092	SR Telecommunications Analyst	AA/AS	3

No.	Labor Categories	Education	Years Experience
ANT-093	Communications Network Manager	BA/BS	6
ANT-102	Hardware Specialist	BA/BS	5
ANT-103	Quality Assurance/IV&V Analyst	BA/BS	2
ANT-104	Quality Assurance/IV&V Specialist	BA/BS	4
ANT-105	Quality Assurance/IV&V Manager	BA/BS	7
ANT-108	Configuration Management Specialist	BA/BS	5
ANT-109	SR Configuration Management Specialist	BA/BS	7
ANT-111	Training Specialist/Instructor	BA/BS	4
ANT-112	SR Training Specialist/Instructor	BA/BS	6
ANT-114	Training Specialist	AA/AS	3
ANT-115	SR Training Specialist	AA/AS	7
ANT-116	Principal Training Specialist	AA/AS	10
ANT-119	Testing and Validation Specialist	BA/BS	*
ANT-121	Principal Testing and Validation Specialist	MA/MS	5
ANT-123	Instructional System Designer	BA/BS	2
ANT-124	SR Instructional System Designer	MA/MS	5
ANT-128	Staff Graphics Design Specialist	AA/AS	5
ANT-129	SR Graphics Design Specialist	AA/AS	8
ANT-130	Principal Graphics Design Specialist	AA/AS	9
ANT-133	Contract Administrator	BA/BS	2
ANT-134	SR Contract Administrator	BA/BS	5
ANT-137	Program Management Specialist	BA/BS	3
ANT-138	SR Program Management Specialist	BA/BS	6
ANT-139	Principal Program Management Specialist	BA/BS	8
ANT-148	SR Documentation Specialist	AA/AS	8
ANT-150	Technical Editor	BA/BS	5
ANT-158	Imagery Analyst	BA/BS	2
ANT-159	Imagery Sr. Analyst	BA/BS	5
ANT-160	Imagery Principal Analyst	BA/BS	8
ANT-161	Imagery Sr. Principal Analyst	MA/MS	20
ANT-162	Geospatial Analyst	BA/BS	2
ANT-163	Geospatial Sr. Analyst	BA/BS	5
ANT-164	Geospatial Principal Analyst	BA/BS	8
ANT-165	Geospatial Sr. Principal Analyst	MA/MS	20

* See Labor Category Descriptions for Specialized Training and Minimum Qualifications

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

Education/Experience Substitutions

The following presents the allowable substitutions based on education and experience:

Four (4) years' experience (in addition to minimum experience requirements) may be substituted for a Bachelor's degree.

Two (2) years' experience (in addition to minimum experience requirements and Bachelor's degree) may be substituted for a Master's degree.

Two (2) years' experience (in addition to minimum requirements and Master's degree) may be substituted for a Ph.D.

For categories where a Bachelor's degree is required, a Master's degree may be substituted for two (2) years' experience; or a doctoral degree may be substituted for three (3) years' experience.

Successful completion of each course in specialized or emerging technology (Windows 2000/XP, Oracle, Powerbuilder, Web development, internet/intranet security, and XML, etc.) may be substituted for one year of experience.

For the categories of JR Network Engineer, Network Engineer, Staff Network Engineer, and Communications Network Manager, a Certificate in a related technology (certified Network Engineer, for example) may be substituted for the degree requirement.

SIN 54151S - LABOR CATEGORY DESCRIPTIONS

ANT-001 Technical Expert Level 5

Minimum/General Experience: Experience qualifications will be determined on a case-by-case basis. Generally, this requires at least six years of general experience in information systems, including four years of specialized experience providing state-of-the art solutions in information systems technology (or, if the particular area of expertise is new state-of-the-art technology, the specialized experience may be less than four years and more consistent with the age of the technology). Performs highly specialized and technical tasks associated with the most current and cutting-edge technologies. May serve as a technical consultant to a project or a number of projects dealing with area of technical expertise. Generally recognized as a leader in the industry in their area of expertise, sought out by others in their area of expertise for advice and guidance.

Functional Responsibility: Provide expert, independent services and leadership in specialized technical areas. Provides expertise on an as-needed basis to all task assignments. Provides expert advice and assistance in state-of-the-art software/hardware. Coordinates with contractor management and Government personnel to ensure that the problem has been properly defined and that the solution will satisfy the Government's requirement.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	10 years
AA/AS	8 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-002 Technical Expert Level 4

Minimum/General Experience: Experience qualifications will be determined on a case-by-case basis. Generally this requires at least eight years of general experience in information systems, including six years of specialized experience providing state-of-the-art solutions in information systems technology (or, if the particular area of expertise is new state-of-the-art technology, the specialized experience may be less than six years and more consistent with the age of the technology). Recognized expert in the technology being addressed.

Functional Responsibility: Provide expert, independent services and leadership in specialized technical areas. Provides expertise on an as-needed basis to all task assignments. Provides expert advice and assistance in state-of-the-art software/hardware. Coordinates with contractor management and Government personnel to ensure that the problem has been properly defined and that the solution will satisfy the Government's requirement.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-003 Technical Expert Level 3

Minimum/General Experience: Experience qualifications will be determined on a case-by-case basis. Generally this requires at least ten years of general experience in information systems, including eight years of specialized experience providing state-of-the-art solutions in information systems technology (or, if the particular area of expertise is new state-of-the-art technology, the specialized experience may be less than eight years and more consistent with the age of the technology). Recognized expert in the technology being addressed.

Functional Responsibility: Provide expert, independent services and leadership in specialized technical areas. Provides expertise on an as-needed basis to all task assignments. Provides expert advice and assistance in state-of-the-art software/hardware. Coordinates with contractor management and Government personnel to ensure that the problem has been properly defined and that the solution will satisfy the Government's requirement.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	16 years
AA/AS	14 years
BA/BS	12 years
Doctorate Degree/Ph.D.	9 years

ANT-004 Technical Expert Level 2

Minimum/General Experience: Experience qualifications will be determined on a case-by-case basis. Generally this requires twelve years of general experience in information systems, including ten years of specialized experience providing state-of-the-art solutions in information systems technology (or, if the particular area of expertise is new state-of-the-art technology, the specialized experience may be less than ten years and more consistent with the age of the

technology.

Functional Responsibility: Provide expert, independent services and leadership in specialized technical areas. Provides expertise on an as-needed basis to all task assignments. Provides expert advice and assistance in state-of-the-art software/hardware. Coordinates with contractor management and Government personnel to ensure that the problem has been properly defined and that the solution will satisfy the Government's requirement.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	18 years
AA/AS	16 years
BA/BS	14 years
Doctorate Degree/Ph.D.	11 years

ANT-005 Technical Expert Level 1

Minimum/General Experience: Experience qualifications will be determined on a case-by-case basis. Generally this requires fifteen years of general experience in information systems, including ten years of specialized experience providing state-of-the-art solutions in information systems technology (or, if the particular area of expertise in new state-of-the-art technology, the specialized experience may be less than ten years and more consistent with the age of the technology). Recognized expert in the technology being addressed.

Functional Responsibility: Provide expert, independent services and leadership in specialized technical areas. Provides expertise on an as-needed basis to all task assignments. Provides expert advice and assistance in state-of-the-art software/hardware. Coordinates with contractor management and Government personnel to ensure that the problem has been properly defined and that the solution will satisfy the Government's requirement.

Minimum Education: Doctorate Degree/Ph.D.

Approved Substitutions	
Education	**Experience**
HS	22 years
AA/AS	20 years
BA/BS	18 years
MA/MS	16 years

ANT-006 Project Manager/Task Lead

Minimum/General Experience: Must have seven years of general experience including five years of specialized experience of which two years were direct supervisory experience.

Functional Responsibility: Monitors each task, and keeps the Program Manager abreast of all problems and accomplishments. Anticipates problems, and works to mitigate the anticipated problems. As a team or project leader, provides technical direction for the complete systems development effort. May serve as a technical authority for a design area. As a staff specialist or consultant, resolves unique and unyielding systems problems using new technology. Can complete tasks within estimated time frames and budget constraints. Schedules and assigns duties to subordinates. Interacts with government management personnel. Reports in writing and orally to contractor management and government representatives, including the government contracting officer.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
MA/MS	5 years
Doctorate Degree/Ph.D.	4 years

ANT-007 Program Manager

Minimum/General Experience: Must have at least ten years' experience, of which at least six years must be specialized. Specialized experience includes: complete engineering project development from inception to deployment, demonstrated ability to provide guidance and direction in the tasks similar to the sample tasks provided in the statement of work, proven expertise in the management and control of funds and resources, demonstrated capability in managing multi-task contracts of this type and complexity. General experience includes increasing responsibilities in information systems design and management.

Functional Responsibility: Serves as the contractor's contract manager, and shall be the contractor's authorized interface with the Government Contracting Officer (CO), the Contracting Officer's Representative (COR), government management personnel and customer agency representatives. Responsible for formulating and enforcing work standards, assigning contractor schedules, reviewing work discrepancies, supervising contractor personnel and communicating policies, purposes, and goals of the organization to subordinates. Shall be responsible for the overall contract performance. Ability to manage and ensure the successful completion multiple technical tasks in assigned program(s)

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	14 years
AA/AS	12 years
MA/MS	8 years
Doctorate Degree/Ph.D.	7 years

ANT-008 Sr. Program Manager

Minimum/General Experience: Must have twelve years' experience, of which at least five years must be supervisory experience. Must have the ability to manage and ensure the successful completion of multiple technical tasks in assigned program(s). Must have the ability to recruit, hire, manage, supervise, train, schedule, coordinate, and evaluate staff as assigned.

Functional Responsibility: Responsible for managing very complex and/or high risk programs. Directs daily staff and task activities to meet client and corporate work objectives. Supervises assigned technical and administrative staff, including subordinate managers. Assures quality of task products, services, and deliverables, including participating in reviews, audits, and site visits. Serves as a liaison with clients to coordinate activities, negotiate tasks, and solve problems. Responsible for coordinating and monitoring subcontractor activities.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	16 years
AA/AS	14 years
MA/MS	10 years
Doctorate Degree/Ph.D.	9 years

ANT-009 Proprietary Product Application Developer

Minimum/General Experience: Completed three proprietary product courses such as Oracle 9i Forms, Oracle 9iAS Release 2PL/SQL, and Oracle 9i J2EE, and at least one year experience performing application development or; received a certification level with the proprietary product (such as Lotus Notes) and at least one year of experience performing applications development, in a broad based ADP setting. One year development experience using high technology and/or emerging technology proprietary software including but not limited to Oracle Application Development Products, Powerbuilder, Lotus Notes, Windows NT, JAVA, Visual C++, Netscape, and other Internet developer and applicator tools. Must have excellent communication skills both written and oral.

Functional Responsibility: Participates in the development of modernized software applications using high technology and/or emerging technology proprietary software.

ANT-010 Proprietary Product Application Designer

Minimum/General Experience: Completed four proprietary product courses such as Data Modeling and Relational Database Design, Oracle IDS Designer, Managing Development Using Oracle Repository, and Oracle 9iAS: Develop Web Based Applications with PL/SQL, Introduction to Design Proprietary Product (such as Oracle SQL, Powerbuilder, Windows NT) and at least one year of experience performing analysis, design and development, or; received a certification level with the proprietary product (such as Lotus Notes) and at least one year of experience performing analysis, design and development or four years of intensive and progressive experience performing analysis, design and development on contemporary hardware using contemporary languages, two years of experience performing design and development using high technology and/or emerging technology CASE technology such as Oracle CASE products, Rational Rose, or UML. Must have excellent communication skills both written and oral.

Functional Responsibility: Performs high-level analysis and design tasks associated with the overall design of application systems using one or more high technology or emerging technology proprietary product tools. Directs emerging technology software development programs to include system and subsystem design and implementation. Works directly with the customer to define requirements.

ANT-011 Proprietary Product Database Administrator

Minimum/General Experience: Completed 3 proprietary product courses such as Oracle 9i DBA Fundamentals II, Oracle 9i Database Performance Tuning, Enterprise DBA Part 1A: Architecture and Administration, and at least two years experience in all phases of system analysis, data base administration, or five years of intensive and progressive experience in all phases of systems analysis, design and development. Three years experience as a database administrator for proprietary product RDBMS, such as ORACLE. Must have experience as Database Administrator with the latest commonly used version of the relevant RDBMS.

Functional Responsibility: Creates and manages the database. Performs exceptionally complex database administration functions which include, but is not limited to, managing/maintaining distributed relational databases residing in a central system. Provides 24 x 7 support for production issues.

ANT-012 Proprietary Product System Architect

Minimum/General Experience: Completed 4 proprietary product courses such as SQL and PL/SQL. Data Modeling and Relational Database Design, Oracle 9i Forms, Oracle 9iAS: Develop Web Based Applications with PL/SQL, and at least one year of experience in application design and development, or; completed three proprietary product courses and at least two years of experience in application design and development, or; six years experience in performing application development in a broad based ADP setting including two years of extensive experience in proprietary product architect tools such as Oracle Design/2000. Must have experience in the latest commonly used version of proprietary product such as Oracle RDBMS version 8.x or 9.x. Must have excellent communication skills both written and oral.

Functional Responsibility: Participates in all phases of system design and development of complex applications generally in a client/server environment using a variety of proprietary product or emerging technology tools in a variety of operating environments. Works closely with the customer to validate system design and architecture.

ANT-013 Business Process Reengineering Analyst

Minimum/General Experience: Completed a minimum of 3 courses in Information Engineering & Business Process Reengineering Methodologies such as Activity Based Costing, IDEF Modeling, Facilitation, and two years' experience performing analysis projects, or; five years' experience, of which at least two years must be specialized in the implementation of information engineering projects using IE tools and methods. Two years business/functional experience is desirable, to support the business modeling.

Functional Responsibility: Applies business process improvement practices to reengineer methodologies/principles and business process modernization projects. Applies, as appropriate, activity and data modeling, transaction flow analysis, internal control and risk analysis and modern business methods and performance measurement techniques.

ANT-015 Scientist

Minimum/General Experience: Requires at least two years' experience. Also requires knowledge of the principles, methods, and techniques used in scientific functional area(s) and knowledge of the associated equipment and systems used in assigned scientific functional area(s).

Functional Responsibility: Initiates and executes scientific research and/or development studies; analyzes problems and develops experimental or theoretical techniques for formalized engineering or scientific studies; resolves a variety of technical problems leading to advanced engineering studies designed to increase efficiency or reduce costs; plans and executes laboratory research; analyzes and organizes technical data and reports into summaries for management or customer review; demonstrates creative ability through patent disclosures or published papers; prepares technical manuals, reports and procedures reflecting advanced knowledge in assigned area of expertise; defines and describes laboratory tests to be performed; participates in test programs and prepares reports of test results; participates in special projects as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-016 Staff Scientist

Minimum/General Experience: Requires at least five years' experience. Also requires knowledge of the principles, methods, and techniques used in scientific functional area(s) and knowledge of the associated equipment and systems used in scientific functional area(s).

Functional Responsibility: Initiates and executes scientific research and/or development studies; analyzes problems and develops experimental or theoretical techniques for formalized engineering or scientific studies; carries out development and testing of programs on systems, components and materials concurrent with design, fabrication or testing to better evaluate and minimize future problems; plans and executes laboratory research; develops alternative solutions to existing problems; uses specialized techniques and ingenuity to select and evaluate approaches to unforeseen or unique problems; performs or delegates all detail work necessary to determine optimum solutions; evaluates proposals and makes recommendations based on sound scientific principles and practical considerations; may provide work leadership for lower level employees; prepares cost and schedule estimates and technical documents on proposed projects in assigned area; demonstrates creative ability through patent disclosures, problem solving, scientific reports or technical papers and articles; participates in special projects as required.

Minimum Education: BA/BS

Approved Substitutions

Education	Experience
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-017 SR Scientist

Minimum/General Experience: Requires at last eight years' experience. Also requires advanced knowledge of the principles, methods, theories, and techniques used in scientific functional area(s), advanced knowledge of the associated equipment and systems used in scientific functional area(s), and ability to serve as a technical task or project lead.

Functional Responsibility: Initiates, directs, and executes scientific research and/or development studies; may serve as a technical team or task lead; plans and performs scientific duties on new and varied problems where only general objectives are stated; coordinates broad phases of a project and performs advanced development work to obtain or maintain technical leadership in assigned field; plans and executes laboratory research; plans scientific effort in coordination with related efforts of other projects, departments, etc.; establishes and defines the theoretical bases and principles which should apply and the empirical test procedures to be used; conducts investigations or tests pertaining to the development of new designs, methods, materials, or processes and investigates possible applications of results; interprets and evaluates test data and results of investigations and develops recommendations; recommends necessary corrections in technical analyses and design to ensure successful project completion; may provide technical consultation in area of specialty; may serve as a technical team or task lead; demonstrates creative ability through patent disclosures, problem solving, scientific reports or technical papers and articles; participates in special projects as required.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	14 years
AA/AS	12 years
BA/BS	10 years
Doctorate Degree/Ph.D.	7 years

ANT-018 Principal Scientist

Minimum/General Experience: Requires at least ten years' experience in a specific scientific field. Also requires advanced knowledge of the principles, methods, theories, and techniques used in scientific functional area(s), as well as associated equipment and systems used in scientific functional area(s). Must also have the ability to serve as a technical team or task lead.

Functional Responsibility: Initiates, directs, and executes advanced-level scientific research and/or development studies. Plans and performs advanced scientific studies on new and varied problems where only general objectives are stated; acts as technical liaison with customers and sponsors, to include the preparation and presentation of high-level technical information; interprets, organizes, and coordinates overall project assignments within an assigned scientific functional area; plans and executes laboratory research; analyzes, evaluates, and plans methods of approach for projects and organizes means to achieve the solution of problems; serves as technical team or task lead; may provide supervision to lower-level staff; establishes and defines the theoretical bases and principles which should apply and the empirical test procedures to be used; conducts complex investigations or tests pertaining to the development of new designs, methods, materials, or processes and investigates possible applications of results; interprets and evaluates test data and results of investigations and develops recommendations; recommends necessary corrections in technical analyses and design to ensure successful project completion; specifies equipment, materials and suppliers required for completion and implementation of projects; evaluates vendor capabilities to provide or build required services, supplies, or equipment; maintains a current knowledge of technologies through the careful review of reports, patents, literature and other data; demonstrates creative ability through patent disclosures, problem solving, scientific reports or technical papers and articles; participates in special projects as required.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	16 years
AA/AS	14 years
BA/BS	12 years
Doctorate Degree/Ph.D.	9 years

ANT-019 SR Principal Scientist

Minimum/General Experience: Requires fifteen years' experience in a specific scientific field. Also requires advanced knowledge of the principles, methods, theories, and techniques used in scientific functional area(s), advanced knowledge of the associated equipment and systems used in scientific functional area(s), and the ability to serve as a technical team or task lead and supervise and direct the work of assigned staff.

Functional Responsibility: Makes decisions and recommendations that are recognized as authoritative

and have an important impact on extensive scientific activities of the organization. This individual acts as primary technical liaison with customers and sponsors, to include the preparation and presentation of high-level technical information; analyzes, evaluates, and plans methods of approach for projects and organizes means to achieve the solution of problems; serves as technical team or task lead; supervises and directs the work of lower-level scientific and technical personnel; plans and executes laboratory research and/or the development and/or evaluation of advanced physics or first-principles engineering models; establishes and defines the theoretical bases and principles which should apply and the empirical test procedures to be used; conducts complex investigations or tests pertaining to the development of new designs, methods, materials, or processes and investigates possible applications of results; interprets and evaluates test data and results of investigations and develops recommendations; recommends necessary corrections in technical analyses and design to ensure successful project completion; specifies equipment, materials and suppliers required for completion and implementation of projects; evaluates vendor capabilities to provide or build required services, supplies, or equipment; maintains a current knowledge of technologies through the careful review of reports, patents, literature and other data; demonstrates creative ability through patent disclosures, problem solving, scientific reports or technical papers and articles; participates in special projects as required.

Minimum Education: Doctorate Degree/Ph.D.

Approved Substitutions	
Education	**Experience**
HS	23 years
AA/AS	21 years
BA/BS	19 years
MA/MS	17 years

ANT-023 JR Systems Engineer

Minimum/General Experience: Requires no experience and knowledge of the principles, methods, and techniques used in the engineering, development, maintenance, and application of multiple operating systems; knowledge of or certification in one or more specific applications or processes may be required, depending on job assignment; must have the ability to write, maintain, and modify technical documentation/specifications.

Functional Responsibility**:** Assists in the design, development, analysis, installation, maintenance, operation and servicing of computer operating/hardware systems; provides customer support; works under direct supervision; does related work as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	4 years
AA/AS	2 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-024 Systems Engineer

Minimum/General Experience: Must have three years' experience of which at least one year must be specialized. Specialized experience includes: analytically solving workflows, organization, and/or planning problems. General experience includes increasing responsibilities in systems engineering.

Functional Responsibility: Designs software tools and subsystems to support software reuse and domain analysis. Interprets software requirements and design specifications to code, and integrates and tests software components.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	7 years
AA/AS	5 years
MA/MS	1 years
Doctorate Degree/Ph.D.	0 years

ANT-025 Staff Systems Engineer

Minimum/General Experience: Must have six years' experience, of which at least three must be specialized. Specialized experience includes: supervision of system engineers, and demonstrated use of interactive, interpretative systems with on-line, real-time acquisition capabilities. General experience includes increasing responsibilities in systems engineering.

Functional Responsibility: Analyzes and studies complex system requirements. Designs software tools and subsystems to support software reuse and domain analyses and manages their implementation. Manages software development and support using formal specifications, data flow diagrams, other accepted design techniques and CASE tools. Estimates software development costs and schedule. Reviews existing programs and assists in making refinements, reducing operating time, and improving current techniques. Supervises software configuration management

Minimum Education: BA/BS

Approved Substitutions

Education	Experience
HS	10 years
AA/AS	8 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-026 SR Systems Engineer

Minimum/General Experience: Must have eight years' directly related experience in all phases of systems engineering. Also requires advanced knowledge of the principles, methods, and techniques used in all phases of the engineering, application, and development of multiple operating systems; knowledge of or certification in specific applications or processes may be required, depending on job assignment.

Functional Responsibility: Participates in all phases of computer operating/hardware systems engineering, including design, analysis, and modeling at a highly technical level; analyzes complex computer software/hardware requirements to provide integration and implementation support; performs operating/hardware systems engineering, including full life cycle design and development; analyzes and documents users' functional and data requirements; develops site survey instruments to gather detailed user requirements and business process analysis data; conducts functional user interviews to document functional, system, customization, and data requirements and data sources; formulates system concepts and architecture, specifies requirements, and develops implementation approaches; determines data requirements for internal processes and external interfaces; develops new systems or tailors commercial products to meet user requirements; directs and coordinates all activities necessary to complete a major engineering project or several small projects to specification and on schedule; may serve as task or project lead, exercising leadership in either a technical role training other hardware engineers and implementing and enforcing established standards and technologies, or in a project coordination role leading tasks and assuming responsibility for the design, development, test and delivery of a software system or application;

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-027 Principal Systems Engineer

Minimum/General Experience: Must have ten years' directly related experience in all phases of systems engineering. Requires advanced knowledge of the principles, methods, and techniques used in all phases of the engineering, application, and development of multiple operating systems; knowledge of or certification in specific applications or processes may be required, depending on job assignment.

Functional Responsibility: Establishes state-of-the-art techniques for designing, developing, modifying and troubleshooting highly complex computer operating/hardware system; may work independently on projects requiring advanced, concentrated and diversified knowledge regarding engineering principles in broad assignment areas or may serve as project lead with supervisory responsibilities. Designs operating/hardware systems; formulates system concepts and architecture, specifies requirements, and develops implementation approaches; identifies and directs resolution of complex hardware/software interface issues; subject matter expert on emerging technologies; directs the development of systems specifications and technical documentation; may serve as project lead, either working independently in a technical role in field of specialization, or in providing work leadership with management or supervisory responsibility for the group;

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	14 years
AA/AS	12 years
MA/MS	8 years
Doctorate Degree/Ph.D.	7 years

ANT-028 SR Principal Systems Engineer

Minimum/General Experience: Must have fifteen years' directly related experience in all phases of systems engineering. Also requires advanced knowledge of the principles, methods, and techniques used in all phases of the engineering, application, and development of multiple operating systems; knowledge of or certification in specific applications or processes may be required, depending on job assignment.

Functional Responsibility: Works at the highest systems level to provide expert advice and counsel to assigned functional/user area managers and project teams for systems of the most complex nature, often crossing functional lines. Designs major computer systems; coordinates work on subsystems; oversees the integration of new applications with established systems and files; confers with assigned systems users and evaluates utilization to identify requirements modifications which will facilitate integration, increase efficiency and/or reduce costs; investigates new procedures, equipment and operating systems to

determine their usefulness and applicability to operations; assists systems management in developing systems analysis standards and provides consultative direction to applications programmers, systems software engineers, computer center operations and user personnel in the planning and scheduling of systems projects which cross functional lines or are of the most complex nature.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	21 years
AA/AS	19 years
BA/BS	17 years
Doctorate Degree/Ph.D.	14 years

ANT-029 Information Engineer

Minimum/General Experience: Must have a minimum of five years' experience, of which at least two years must be specialized in information systems development, functional and data requirements analysis, systems analysis and design, programming, program design and documentation preparation. The following experience is also required: two years' experience in the implementation of information engineering projects and experience in systems analysis; design and programming using CASE and IE tools and methods. Two years business/functional experience is desirable, to support the business modeling activities. Must demonstrate the ability to work independently or under only general direction.

Functional Responsibility: Applies a business-wide set of disciplines for the planning, analysis, design and construction of information systems on a business-wide basis or across a major sector of the business. Performs business strategic systems planning, information planning, business and analysis. Performs process and data modeling in support of the planning and analysis efforts using both manual and automated tools such as Integrated Computer Aided Software Engineering (I-CASE) tools. Applies reverse engineering and reengineering disciplines to develop migration strategic and planning documents. Provides technical guidance in software engineering techniques and automated support tools.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-030 SR Information Engineer

Minimum/General Experience: Must have at least eight years' experience, of which at least five must be specialized in information systems development, functional and data requirements analysis, systems analysis and design, programming, program design and documentation preparation. The following experience is also required: demonstrated experience in the implementation of information engineering projects; systems analysis, design and programming using CASE and IE tools and methods and three to five years of business or functional experience. Must demonstrate the ability to work independently or under only general direction.

Functional Responsibility: Applies business process improvement practices to reengineer methodologies/principles and business process modernization projects. Applies, as appropriate, activity and data modeling, transaction flow analysis, internal control and risk analysis and modern business methods and performance measurement techniques. Assist in establishing standards for information systems procedures. Develops and applies organization-wide information models for use in designing and building integrated, shared software and database management systems. Construct sound, logical business improvement opportunities consistent with the CIM guiding principles, cost savings, and open system architecture objectives. Provides daily supervision and direction to staff.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-031 Principal Information Engineer

Minimum/General Experience: Must have at least ten years' experience in information systems development, functional and data requirements analysis, systems analysis and design, programming, program design and documentation preparation. A minimum of five years' experience is required in the following: demonstrated experience in managing the implementation of information engineering projects and experience in systems analysis, design and programming using CASE and IE tools and methods. Proven managerial and supervisory skills. Demonstrated exceptional written and oral communications skills, including giving formal presentations to different audiences. Must demonstrate the ability to work independently or under only general direction.

Functional Responsibility: Applies an enterprise-wide set of disciplines for the planning, analysis, design and construction of information systems on an enterprise-wide basis or across a major sector of the enterprise. Develops analytical and computational techniques and methodology for problem solutions. Performs enterprise-wide strategic systems planning, business information planning, business and analysis. Performs process and data modeling in support of the planning and analysis efforts using both manual and automated tools such as Integrated Computer Aided Software Engineering (I-CASE) tools. Applies reverse engineering and re-engineering disciplines to develop migration strategic and planning documents. Provides technical guidance in software engineering techniques and automated support tools.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	14 years
AA/AS	12 years
MA/MS	8 years
Doctorate Degree/Ph.D.	7 years

ANT-032 JR Software Engineer

Minimum/General Experience: Requires no experience and knowledge of the fundamental concepts, practices and procedures used in software engineering and applications and systems development.

Functional Responsibility: Assists in the design, development, analysis, and implementation of software operating systems and software application programs; works under general supervision; does related work as required. Works from specifications to develop and modify operating systems and software applications; participates in the design, coding, testing, debugging, and documentation of programs; assists in the definition of limited design specifications and parameters; assists engineers or analysts with the hardware/software integration of the application or utility into software operating systems; assists in the analysis of system architecture requirements; may customize purchased applications; participates in the research of emerging technologies to determine impacts on application execution; analyzes and documents client needs and requirements; assists with writing, modifying, and maintaining technical documentation and specifications such as user manuals, system documentation, and training materials; performs integration testing and support of various computer operating and/or network systems; troubleshoots and provides customer support for software operating system and application issues; maintains current knowledge of relevant hardware and software applications as assigned.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	4 years
AA/AS	2 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-033 Software Engineer

Minimum/General Experience: Requires at least two years' directly related experience in software engineering, including the design, coding, testing, and documentation of computer programs. Also requires knowledge of the fundamental concepts, practices and procedures used in software engineering and applications and systems development.

Functional Responsibility: Participates in the design, development, analysis, and implementation of software operating systems and software application programs; works under general supervision; performs software operating systems and application engineering, including full life cycle design and development; works from specifications to develop and modify operating systems and software applications; participates in the design, coding, testing, debugging, and documentation of programs; participates in the definition of limited design specifications and parameters; assists engineers or analysts with the hardware/software integration of the application or utility into software operating systems; analyzes system architecture requirements; performs requirements acquisition and definition and data analysis; may customize purchased applications; performs technical and subject matter research on emerging technologies to determine impacts on application execution; analyzes and documents client needs and requirements; participates in the writing, modifying, and maintaining technical documentation and specifications such as user manuals, system documentation, and training materials; performs integration testing and support of various computer operating and/or network systems; troubleshoots and provides customer support for software operating system and application issues; maintains current knowledge of relevant hardware and software applications as assigned; participates in special projects as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-034 Staff Software Engineer

Minimum/General Experience: Requires at least three years' directly related experience in software engineering, including the design, coding, testing, and documentation of computer programs. Also requires knowledge of the fundamental concepts, practices and procedures used in software engineering and applications and systems development.

Functional Responsibility: Performs software operating systems and software application programs design, development, analysis, and implementation; performs software operating systems and application engineering, including full life cycle design and development; works under limited supervision; works from specifications to develop and modify operating systems and software programming applications; designs, codes, tests, debugs, and documents programs; defines limited design specifications and parameters; resolves hardware/software compatibility and interface design considerations; analyzes system architecture requirements; performs requirements acquisition and definition and data analysis; may customize purchased applications; conducts technical and subject matter research on emerging technologies to determine impacts on application execution; analyzes and documents client needs and requirements; participates in writing, modifying, and maintaining technical documentation and specifications such as user manuals, system documentation, and training materials; performs integration testing and support of various computer operating and/or network systems; troubleshoots and provides customer support for software operating systems and application issues; maintains current knowledge of relevant hardware and software applications as assigned.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	7 years
AA/AS	5 years
MA/MS	1 years
Doctorate Degree/Ph.D.	0 years

ANT-035 SR Software Engineer

Minimum/General Experience: Requires at least five years' directly related experience in the design, writing, and testing of computer programs or database development. Also requires comprehensive knowledge of the principles, practices, and procedures used in all phases of full life cycle applications and systems development, engineering, programming, and analysis

Functional Responsibility: Participates in all phases of software operating systems and software application programs engineering, including design, analysis, and modeling at a highly technical level; Performs software operating systems and application engineering, including full life cycle application systems design and development; assesses system architecture and hardware limitations; defines and selects new concepts and approaches for the design, development, and implementation of software engineering applications; defines complex design specifications and parameters; resolves complex hardware/software compatibility and interface design considerations; performs requirements acquisition and definition and data analysis; directs research on emerging technologies to determine impacts on application execution; performs systems modeling; may perform database analysis, design, implementation, and testing; writes, modifies, and maintains technical documentation and specifications such as user manuals, system documentation, and training materials; performs integration testing and support of various computer operating and/or network systems; troubleshoots and provides customer support for software operating systems and application issues; analyzes and documents client needs and requirements; serves as liaison with clients, participates in meetings to ensure client needs are met and may make client presentations; may serve as task or team lead, exercising leadership in either a technical role training other software engineers and implementing and enforcing established standards and technologies, or in a project coordination role leading tasks and assuming responsibility for the design, development, test and delivery of a software system or application;

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-036 Principal Software Engineer

Minimum/General Experience: Requires at least eight years' directly related experience in the design, writing, and testing of computer programs or database development, with two or more years experience in software operating systems architecture. Also requires expert knowledge of the principles, practices, and procedures used in all phases of full life cycle applications and systems development, engineering, programming, and analysis at a highly technical level.

Functional Responsibility: Participates in all phases of software operating systems and software application programs engineering, including design, analysis, and modeling at an expert level; establishes state-of-the-art techniques for designing, developing, modifying and troubleshooting highly complex software operating

systems and applications architectures; defines complex design specifications and parameters; identifies and directs resolution of complex hardware/software interface issues; can serve as a subject matter expert on emerging technologies; directs the development of systems specifications and technical documentation; may serve as project lead, either working independently in a technical role in field of specialization, or providing work leadership with management or supervisory responsibility for the group.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	14 years
AA/AS	12 years
BA/BS	10 years
Doctorate Degree/Ph.D.	7 years

ANT-037 Software Architect

Minimum/General Experience: Requires ten years' directly related experience in the design, writing, and testing of computer programs or database development, with four or more years experience in software operating systems architecture. Also requires expert knowledge of the principles, practices, and procedures used in all phases of full life cycle applications and systems development, engineering, programming, and analysis at a highly technical level.

Functional Responsibility: Establishes state-of-the-art techniques for designing, developing, modifying and troubleshooting highly complex software operating systems and applications architectures; defines complex design specifications and parameters; identifies and directs resolution of complex hardware/software interface issues; is recognized as a subject matter expert in all areas of software engineering, including emerging technologies; directs the development of systems specifications and technical documentation; may serve as project lead, either working independently in a technical role in field of specialization, or providing work leadership with management or supervisory responsibility for the group; responsible for task cost, schedule and level of effort estimates; reports project progress directly to senior management; performs business development services; may provide expertise to multiple projects and tasks; may supervise and direct the work of assigned staff.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	16 years
AA/AS	14 years
BA/BS	12 years
Doctorate Degree/Ph.D.	9 years

ANT-038 Computer Security Specialist

Minimum/General Experience: Must have a minimum of seven years' experience, of which at least five years must be information security/Information Assurance (IA) experience. Must have experience in security administration, evaluation of security/Information Assurance product capabilities, assessment and policy development. Must have a solid understanding of federal information security/assurance policies, standards and regulations.

Functional Responsibility: Gathers and organizes technical information about an organization's mission goals and needs, IT infrastructure and existing security/IA products. Assists in developing security/IA policies, procedures and standards. Responsibilities will include working with the customer to minimize risks and assess and secure networks.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
MA/MS	5 years
Doctorate Degree/Ph.D.	4 years

ANT-039 SR Computer Security Specialist

Minimum/General Experience: Must have a minimum of ten years' experience, of which at least eight must be information security/Information Assurance (IA) experience. Must have experience in security administration, evaluation of security/Information Assurance product capabilities, assessment and policy development. Must have a solid understanding of federal information security/assurance policies, standards and regulations.

Functional Responsibility: . Gathers and organizes technical information about an organization's mission goals and needs, IT infrastructure, and existing security/IA products. Assists in developing security/IA policies, procedures, and standards. Responsibilities will include working with the customer to minimize risks and assess and secure networks. Evaluates and recommends security products for various platforms and initiatives. May act as a project leader and provide technical leadership and guidance.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	14 years
AA/AS	12 years
MA/MS	8 years
Doctorate Degree/Ph.D.	7 years

ANT-040 JR Database Architect

Minimum/General Experience: Requires at least two years' directly related experience in the design, maintenance, and coding of databases. Also requires knowledge of the principles, methods, and techniques used in all phases of database development, coding, and design, including business analysis, event modeling, logical and physical database design, data access analysis and design, DBMS optimization, archive and recovery strategy, load strategy design and implementation, security, and change management.

Functional Responsibility: Participates in the design, maintenance, enhancement, and coding of relational databases; analyzes and determines information needs and elements, data relationships and attributes, data flow and storage requirements, and data output and reporting capabilities; assists on developing data modeling and participates in data acquisition and access analysis and design, and archive, recovery, and load strategy design and implementation; coordinates new data development ensuring consistency and integration with existing data warehouse structure; reviews requests for data and data usage, researches data sources for new and better data feeds; participates in continuous improvement efforts in enhancing performance and providing increased functionality; assists with the development of screens and queries; tests designed applications; assists with upgrades and maintenance of hardware and software; maintains current knowledge of relevant hardware and software applications as assigned; participates in special projects as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-041 Database Architect

Minimum/General Experience: Requires at least three years' directly related experience in the design, maintenance, and coding of databases. Also requires knowledge of the principles, methods, and techniques used in all phases of database development, coding, and design, including business analysis, event modeling, logical and physical database design, data access analysis and design, DBMS optimization, archive and recovery strategy, load strategy design and implementation, security, and change management

Functional Responsibility: Designs, maintains, enhances, and codes relational databases; analyzes and determines information needs and elements, data relationships and attributes, data flow and storage requirements, and data output and reporting capabilities; develops data modeling and participates in data acquisition and access analysis and design, and archive, recovery, and load strategy design and implementation; coordinates new data development ensuring consistency and integration with existing data warehouse structure; reviews requests for data and data usage, researches data sources for new and better data feeds; participates in continuous improvement efforts in enhancing performance and providing increased functionality; designs data structures to accommodate database production, storage, maintenance, and accessibility; develops screens and queries; tests designed applications; performs upgrades and maintenance of hardware and software; provides technical support and guidance to users; maintains current knowledge of relevant hardware and software applications as assigned; may serve as team or technical task lead; participates in special projects as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	7 years
AA/AS	5 years
MA/MS	1 years
Doctorate Degree/Ph.D.	0 years

ANT-042 SR Database Architect

Minimum/General Experience: Requires at least five years' directly related experience in the design, maintenance, and coding of databases. Also requires advanced knowledge of the principles, methods, and techniques used in all phases of database development, coding, and design, including business analysis, event modeling, logical and physical database design, data access analysis and design, DBMS optimization, archive and recovery strategy, load strategy design and implementation, security, and change management.

Functional Responsibility: Designs, maintains, enhances, and codes relational databases; analyzes and determines information needs and elements, data relationships and attributes, data flow and storage

requirements, and data output and reporting capabilities; develops data modeling and is responsible for data acquisition and access analysis and design, and archive, recovery, and load strategy design and implementation; coordinates new data development ensuring consistency and integration with existing data warehouse structure; reviews business requests for data and data usage, researches data sources for new and better data feeds; participates in continuous improvement efforts in enhancing performance and providing increased functionality; designs data structures to accommodate database production, storage, maintenance, and accessibility; develops screens and queries; tests designed applications; may perform upgrades and maintenance of hardware and software; provides technical support and guidance to users; maintains current knowledge of relevant hardware and software applications as assigned; may serve as team or technical task lead and provide guidance and training to lower-level staff; participates in special projects as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-045 Computer Programmer/Analyst

Minimum/General Experience: Must have at least three years' experience in the computer programming field. Depending on the job assignment, knowledge of or certification in specific applications or processes may be required in the following areas: Web technologies, design technologies, specific programming languages, authoring languages and systems, and Modeling and Simulation (M&S) technologies, processes, and tools.

Functional Responsibility: Generates new code and corrects, converts, and/or modifies existing code to meet documented standards; designs new and/or redesigns and maintains existing software products; identifies client needs and requirements based on evaluation of client documentation and interviews; performs data and technical analysis; performs a variety of testing procedures on assigned products, analyzes test results, and corrects problems; prepares test scripts and descriptions and examines to locate necessary modifications; analyzes and modifies program specifications and documentation to support contract requirements; may design and develop computer-based and/or multimedia courseware for customer training initiatives utilizing appropriate authoring languages, systems, animation and graphics software; provides customer support to clients and troubleshoots problems.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	7 years
AA/AS	5 years
MA/MS	1 years
Doctorate Degree/Ph.D.	0 years

ANT-046 Staff Computer Programmer/Analyst

Minimum/General Experience: Requires at least four years' experience in the computer programming field. Depending on the job assignment, knowledge of or certification in specific applications or processes may be required in the following areas: Web technologies, design technologies, specific programming languages, authoring languages and systems, and Modeling and Simulation (M&S) technologies, processes, and tools.

Functional Responsibility: Programs, designs, analyzes, codes, implements, and tests software applications and modules in various languages, including business software systems and applications; provides network support including providing technical solutions and training; writes, modifies, and maintains software documentation and specifications; performs integration testing and support of various computer operating and/or network systems; installs, configures, and troubleshoots various hardware and software platforms; analyzes and documents client needs and requirements; may train other programmer/analysts; develops product documentation to describe system requirements and use; may design and develop computer-based and/or multimedia courseware for customer training initiatives utilizing appropriate authoring languages, systems, animation and graphics software; participates in meeting; prepares reports on analyses, findings, and project progress; performs technical research on emerging technologies to determine impacts on application execution.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	8 years
AA/AS	6 years
MA/MS	2 years
Doctorate Degree/Ph.D.	1 years

ANT-047 SR Computer Programmer/Analyst

Minimum/General Experience: Requires at least five years' experience in the computer programming field. Depending on the job assignment, knowledge of or certification in specific applications or processes may be required in the following areas: Web technologies, design technologies, specific programming languages, authoring languages and systems, and Modeling and Simulation (M&S) technologies, processes, and tools.

Functional Responsibility: Participates in all phases of software development, including system design, analysis, architecture, and engineering; programs, designs, analyzes, codes, implements, and tests software applications, modules, and databases in various languages, including those associated with scientific, technical, or engineering problems; performs process analyses in order to recommend improvements; performs system, network, and/or database administration, analysis, design, implementation, and testing; analyzes and documents client needs and requirements; provides technical support including providing technical solutions and training; writes, modifies, and maintains software documentation and specifications;
Performs a variety of testing for computer operating and/or network systems; performs data and technical analysis and information engineering; installs, configures, and troubleshoots various hardware and software platforms; may design and develop computer-based and/or multimedia courseware for customer training initiatives utilizing appropriate authoring languages, systems, animation and graphics software; participates in meetings and design reviews; prepares reports on analyses, findings, and project progress; performs technical research on emerging technologies to determine impacts on application execution; may serve as a technical task or team lead.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-048 Principal Computer Programmer/Analyst

Minimum/General Experience: Requires at least eight years' experience in the computer programming field. Depending on the job assignment, knowledge of or certification in specific applications or processes may be required in the following areas: Web technologies, design technologies, specific programming languages, authoring languages and systems, and Modeling and Simulation (M&S) technologies, processes, and tools.

Functional Responsibility: Participates in all phases of software development, including system design, analysis, architecture, and engineering; plans and directs the development of major programming projects and the installation of systems; programs, designs, analyzes, codes, implements, and tests software applications, modules, and databases in various languages, including those associated with scientific, technical, or engineering problems; performs process analyses in order to recommend improvements; performs system, network, and/or database administration, analysis, design, implementation, and testing; analyzes and documents client needs and requirements; provides technical support including providing technical solutions and training; writes, modifies, and maintains software documentation and specifications; performs a variety of testing for computer operating and/or network systems; performs data and technical analysis and information engineering; installs, configures, and troubleshoots various hardware and software platforms; may design and develop computer-based and/or multimedia courseware for customer training initiatives utilizing appropriate authoring languages, systems, animation and graphics software; participates in meetings and design reviews; prepares reports on analyses, findings, and project progress; may supervise and direct the work of lower-level analysts; performs technical research on emerging technologies to determine impacts on application execution; may serve as a technical task or team lead.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-049 Computer Systems Programmer

Minimum/General Experience: Must have at least five years' experience, of which at least three years must be specialized. Specialized experience includes: systems analysis and programming. Must demonstrate the ability to work independently or under only general direction.

Functional Responsibility: Create and/or maintain operating systems, communications software, database packages, compilers, assemblers, and utility programs. Modify existing software, as well as create special-purpose software to ensure efficiency and integrity between systems and applications. Assist in the development, testing and maintenance of disaster recovery procedures.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**

HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-050 Web Designer

Minimum/General Experience: Requires at least two years experience in Web design. Also requires knowledge of the principles, methods, and techniques used in Web design.

Functional Responsibility: Designs and builds Web pages using a variety of graphics software applications, techniques, and tools; designs and develops user-interface features, site animation, and special-effects elements; designs the Website to support the customer's strategies and goals relative to external communications; contributes to the Web design group's efforts to specify, improve, and implement the look, feel, and function of online projects; interfaces directly with customers, users, graphic artists, and Web software developers.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-051 Web Developer

Minimum/General Experience: Requires at least four years' experience in software development, installation, and modification in an online environment.

Functional Responsibility: Provides application development and technical support for internal and external Webs; develops Web pages and applications for customers; collaborates with graphic artists to develop Web page graphics that support interactive, marketing-focused content; provides technical consultation in new systems development, new package evaluations and enhancements of existing systems; prepares functional specifications from which programs will be written, then designs, codes, tests, debugs and documents programs; participates in the technical design, development, testing, implementation and maintenance of Web site enhancements; plans, schedules and conducts systems tests, monitors test results, and takes appropriate corrective action; may prepare technical user guides.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	8 years
AA/AS	6 years
MA/MS	2 years
Doctorate Degree/Ph.D.	1 years

ANT-052 SR Web Developer

Minimum/General Experience: Requires at least eight years' experience, of which at least two years must include technical leadership experience and at least four years' experience in software development, installation, and modification in an online environment.
Functional Responsibility: Designs and develops well-integrated and cost-effective solutions for internal and external Webs; works closely with client project managers and technical leaders to understand customers' business objectives and systems requirements; designs and develops Web infrastructures; designs and implements an intranet strategy for authorization of users to access controlled components; designs relational databases to perform well logically and physically for decision support; coordinates enhancements and maintenance of Web systems and sites; provides recommendations for server operating systems, hardware requirements and encryption standards for communications to and from secure servers; provides technical advice and expertise to Webmasters and Web developers in the installation, acceptance testing, and evaluation of newly released and beta software; may serve as a functional/technical team or task lead.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-053 Web Tech Administrator

Minimum/General Experience: Requires at least four years' experience in systems technology. Must have an understanding of federal information security/assurance policies, standards and regulations.

Functional Responsibility: Responsible for achieving overall technical integrity of organization's Website. Maintains and upgrades hardware and software including website technical architecture related to hardware and telecommunication connectivity. Administers e-mail, chat, and FTP and HTTP services. Communicates router configuration changes and troubleshoots system errors and bugs. Maintains

servers, creates monitoring reports and logs, and ensures functionality of links. Monitors site for acceptable performance and user accessibility. Establishes backups and monitors site security.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	8 years
AA/AS	6 years
MA/MS	2 years
Doctorate Degree/Ph.D.	1 years

ANT-054 Web Content Manager

Minimum/General Experience: Requires at least two years' experience in production management, Web page design, Web design languages, and Web graphics types and standards.

Functional Responsibility: Responsible for developing and providing content that will motivate and entertain users so that they regularly access the Website and utilize it as a major source for information and decision making. Responsible for managing/performing Website editorial activities including gathering and researching information that enhances the value of the site. Locates, negotiates, and pursues content. Seeks out customers to gather feedback for Website improvement and enhancements.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-055 Web Security Administrator

Minimum/General Experience: Requires at least four years' experience in software development, installation, and modification in an online environment. Requires experience in security administration, evaluation of security/Information Assurance (IA) product capabilities, assessment and policy development. Must have a solid understanding of federal information security/assurance policies, standards and regulations.

Functional Responsibility: Performs all procedures necessary to ensure the safety of the organization's Website and transactions across the Internet. Applies Internet Firewall technologies to maintain security. Ensure that the user community understands and adheres to necessary procedures to maintain security. Works under limited supervision.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	8 years
AA/AS	6 years
MA/MS	2 years
Doctorate Degree/Ph.D.	1 years

ANT-057 Computer Systems Analyst

Minimum/General Experience: Must have at least three years of computer experience in assignments of a technical nature working under close supervision and direction. Must have at least one year experience in analyzing and programming applications on large-scale on mid-tier computers (or LAN-based) with a minimum of one year of design and programming of moderately complex ADP systems.

Functional Responsibility: Develops requirements for information systems form a project's inception to conclusion. Develops required specifications for simple to moderately complex systems. Assists senior computer systems analyst in preparing input and test data for the proposed system.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	7 years
AA/AS	5 years
MA/MS	1 years
Doctorate Degree/Ph.D.	0 years

ANT-058 Staff Computer Systems Analyst

Minimum/General Experience: Must have five years of computer experience in information systems design and management. At least three years of experience in analysis and design of business applications for complex large-scale or mid-tier computer systems, or LAN-based systems.

Functional Responsibility: Analyzes and develops computer software processing a wide range of capabilities, including numerous engineering, business, and records management duties. Develops plans for systems from project inception to conclusion. Analyzes the problem and the information to be processed. Defines the problem, and develops system requirements and program specifications from which programmers prepare detailed flow charts, programs, and tests. Coordinates closely with programmers to

ensure proper implementation of program and system specifications. Develops, in conjunction with functional users, system alternative solutions.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-059 SR Computer Systems Analyst

Minimum/General Experience: Must have eight years of computer experience working independently or under general direction on complex application problems involving all phases of systems analysis. At least five years' experience in analysis and design of business applications for complex, large-scale or mid-tier computer systems, or LAN-based systems.

Functional Responsibility: Analyzes and evaluates user needs and identifies resources required for each task to determine functional requirements; conceptualizes, develops, and implements complex systems designed to meet client requirements; defines systems objectives and prepares system design specifications to meet requirements; designs, develops, implements, and tests new systems or modifies existing systems that meet the user's needs; codes applications and tests to software requirements; writes or updates software specifications; analyzes procedures and systems to refine their formulation and convert to programmable formats; analyzes data requirements to determine data source and destinations; coordinates with client to define problem, determine data availability, report requirements, and resolve system design problems; creates logical data models based on functional requirements; performs quality review of specifications for internal and external delivery; troubleshoots and provides technical support and solutions to users; develops analytical tools for use in the design and redesign of programs as assigned; may serve as a technical team or task lead.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-060 Principal Computer Systems Analyst

Minimum/General Experience: Must have ten years' of computer experience working independently or under general direction on complex application problems involving all phases of systems analysis. At least five years' experience in analysis and design of business applications for complex, large-scale or mid-tier computer systems, or LAN-based systems.

Functional Responsibility: Analyzes and evaluates user needs and identifies resources required for each task to determine functional requirements; conceptualizes, develops, and implements complex systems designed to meet client requirements; defines systems objectives and prepares system design specifications to meet requirements; designs, develops, implements, and tests new systems or modifies existing systems that meet the user's needs; develops and executes test plans; codes applications and tests to software requirements; writes or updates software specifications as necessary; writes technical project documentation including detailed design documents and program specifications; analyzes procedures and systems to refine their formulation and convert to programmable formats; analyzes data requirements to determine data source and destinations; coordinates with client to define problem, determine data availability, report requirements, and resolve system design problems; creates logical data models based on functional requirements; performs quality review of specifications for internal and external delivery; troubleshoots and provides technical support and solutions to users; develops analytical tools for use in the design and redesign of programs as assigned; may serve as a technical task or team lead.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	14 years
AA/AS	12 years
MA/MS	8 years
Doctorate Degree/Ph.D.	7 years

ANT-061 Legacy System Analyst

Minimum/General Experience: Expert with five years of experience in a specific "legacy system(s)" functionality to include knowledge of designated "legacy" hardware, operating systems, capacities, configurations, applications programs, preference programming languages, and administration, operations, and maintenance characteristics of the designated "legacy" system.

Functional Responsibility: Analyze requirements for maintaining, modifying or converting unique application systems that are deemed "legacy" systems. Provide guidance and technical/functional advice to programmers. Provide unique knowledge of the

history of changes to the "legacy" applications. Develop plans to migrate "legacy" systems to new technologies and/or new functionality. Analyze and document "legacy" system functionality to identify mandatory requirements to be fulfilled by migration system candidates. May also participate in the analysis and evaluation of migration system candidates. May also participate in designing, developing and implementing changes to "legacy" systems to accommodate such requirements as interim interfaces to migration systems and/or conversion to migration systems.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	5 years
AA/AS	3 years
BA/BS	1 year
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-062 JR Functional Analyst/Specialist

Minimum/General Experience: Requires at least one year directly related experience in a specific functional area.

Functional Responsibility: Analyzes user needs and performs research and functional analysis on a variety of projects; works under direct supervision; does related work as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	5 years
AA/AS	3 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-063 Functional Analyst/Specialist

Minimum/General Experience: This position requires a minimum of five years' experience, of which at least three years must be specialized. Specialized experience includes: developing functional requirements for complex integrated systems. Must demonstrate the ability to work independently or under only general direction.

Functional Responsibility: Analyzes user needs to determine functional requirements. Performs functional allocation to identify required tasks and their interrelationships. Identifies resources required for each task.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-064 SR Functional Analyst/Specialist

Minimum/General Experience: This position requires a minimum of seven years' experience, of which at least six years must be specialized. Specialized experience includes: developing functional requirements for complex integrated systems. Must demonstrate the ability to work independently or under only general direction.

Functional Responsibility: Analyze user needs to determine functional requirements. Performs functional allocation to identify required tasks and their interrelationships. Identifies resources required for each task. Provides daily supervision and direction to support staff.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
MA/MS	5 years
Doctorate Degree/Ph.D.	4 years

ANT-065 Principal Functional Analyst/Specialist

Minimum/General Experience: This position requires at least eight years' experience, of which at least six years must be specialized. Specialized experience includes developing functional requirements for complex integrated systems. Requires advanced technical knowledge of the principles, methods, techniques, work processes, and applicable regulations in assigned subject-matter area(s).

Functional Responsibility: Analyzes user needs and performs research and functional analysis on a variety of projects at a highly technical level; may have supervisory responsibility; serves as technical advisor to clients in assigned subject areas' recommends functional changes, and identifies areas for further investigation; generates recommendations in the form of technical briefings, reports, and other major documents provided to senior level client personnel; may serve as a technical team or task lead.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	14 years
AA/AS	12 years
BA/BS	10 years
Doctorate Degree/Ph.D.	7 years

ANT-066 SR Principal Functional Analyst/Specialist

Minimum/General Experience: This position requires at least ten years' experience, of which at least six years must be specialized. Specialized experience includes developing functional requirements for complex integrated systems. Requires advanced technical knowledge of the principles, methods, techniques, work processes, and applicable regulations in assigned subject-matter area(s).

Functional Responsibility: Analyzes user needs and performs research and functional analysis on a variety of projects at a highly technical level; may have supervisory responsibility; serves as technical advisor to clients in assigned subject areas; recommends functional changes, and identifies areas for further investigation; generates recommendations in the form of technical briefings, reports, and other major documents provided to senior level client personnel; serves as primary client liaison and coordinates with sub-contractors, government personnel, and technical experts; serves as technical team or task lead.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	16 years
AA/AS	14 years
BA/BS	12 years
Doctorate Degree/Ph.D.	9 years

ANT-067 Data Management Specialist

Minimum/General Experience: Must have at least six years' experience, of which at least three years must be specialized. Specialized experience includes: demonstrated experience using current DBMS technologies, application design utilizing database management systems and experience with DBMS internals. General experience includes increasing responsibilities in DBMS systems analysis and programming. Must demonstrate the ability to work independently or under only general direction.

Functional Responsibility: Provides highly technical expertise in the use of DBMS. Evaluates and recommends available DBMS products to support validated user requirements. Defines file organization, indexing methods, and security procedures for specific user applications.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	10 years
AA/AS	8 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-068 Data Administrator

Minimum/General Experience: Must have at least six years' of general experience in systems analysis or programming including four years of specialized experience in DBMS.

Functional Responsibility: Provides highly technical expertise and guidance in the design, implementation, operation and maintenance of database management systems (DBMS). Evaluates and recommends available DBMS products after matching requirements with system capabilities. Determines file organization, indexing methods, and security procedures for specific applications. Controls the design and use of databases. Controls the global view of databases, controls the access to the databases, assures the safekeeping of the databases (from accidental or intentional damage or loss), and monitors the use of databases. Must be capable of defining all required database administration policies, procedures, standards, and guidelines. Is an authority on the design of databases and the use of database management systems. Evaluates and recommends available DBMS products after matching requirements with system capabilities. Prepares and delivers presentations on DBMS concepts.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	10 years
AA/AS	8 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-069 Data Manager

Minimum/General Experience: Must have at least seven years' experience, of which at least five must be specialized. Specialized experience includes: demonstrated experience using current DBMS technologies, application design utilizing various database management systems and experience with DBMS internals. General experience includes increasing responsibilities in DBMS systems analysis

and programming. Must demonstrate the ability to work independently or under only general direction.

Functional Responsibility: Manages the development of database projects. Plans and budgets staff and database resources. When necessary, reallocates resources to maximize benefits. Prepares and delivers presentations on Database Management Systems (DBMS) concepts. Provides daily supervision and direction to support staff.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
MA/MS	5 years
Doctorate Degree/Ph.D.	4 years

ANT-070 Computer Operations Manager

Minimum/General Experience: Must have at least six years' experience, of which at least three years are specialized. Specialized experience includes: supervision and operations experience on a large-scale computer system, knowledge of hardware, software and operating systems. General experience includes operations experience on a large-scale computer system.

Functional Responsibility: Manages the work of computer operations personnel; identifies processing requirements and schedules job streams for computer runs; responsible for security and routing of input and output data, problem resolution and restart/recovery, interpreting technical documentation standards and preparation of documentation according to standards; interfaces with client and/or other government personnel; determines appropriate course of action in case of malfunction and confers with and directs staff as warranted.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	8 years
BA/BS	4 years
MA/MS	2 years
Doctorate Degree/Ph.D.	1 years

ANT-071 SR Computer Operations Manager

Minimum/General Experience: Must have at least eight years' experience, of which at least four years are specialized. Specialized experience includes: supervision and operations experience on a large-scale computer system, knowledge of hardware, software and operating systems. General experience includes operations experience on a large-scale computer system.

Functional Responsibility: Manages and directs the operations and support of the computer systems and peripheral equipment in large scale or multi-shift operations; supervises and directs the work of computer operations personnel; identifies processing requirements and schedules job streams for computer runs; responsible for the security and routing of input and output data, problem isolation and restart/recovery, interpreting technical documentation standards and preparation of documentation according to standards, and interfacing with client and/or government personnel; determines appropriate course of action in case of malfunction and confers with and directs staff as warranted.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-076 Communications Engineer

Minimum/General Experience: Must have at least six years of general experience with telecommunications systems including three years of specialized experience.

Functional Responsibility: Provides technical support for telecommunications activities including planning, designing, installing, and maintaining large telecommunications networks. Develops, operates, and maintains voice, video, and/or data communications systems. Applies telecommunications engineering principles and theory to propose design and configuration alternatives. Evaluates existing communications systems to identify deficiencies and performance improvements. Consults with user personnel to ensure that problems have been properly identified and that the solution will meet the requirements. Analyzes system performance, usage and traffic flows, accesses and interfaces, transmission techniques, and protocols. Performs system analyses and feasibility studies concerning communications and communication networks. Prepares studies and gives presentations on communications concepts. Provides technical guidance to other personnel concerning data communications requirements. Participates in preparing specifications for acquiring commercially available data communications networks.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	10 years
AA/AS	8 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-077 SR Communications Engineer

Minimum/General Experience: Must have at least ten years of general experience with telecommunications systems including four years of specialized experience.

Functional Responsibility: Provides technical direction for telecommunications activities including planning, designing, installing, and maintaining large telecommunications networks. Develops, operates, and maintains voice, video, and/or data communications systems. Applies telecommunications engineering principles and theory to propose design and configuration alternatives. Evaluates existing communications systems to identify deficiencies and performance improvements. Consults with user personnel to ensure that problems have been properly identified and that the solution will meet the requirements. Analyzes system performance, usage and traffic flows, accesses and interfaces, transmission techniques, and protocols. Performs system analyses and feasibility studies concerning communications and communication networks. Prepares studies and gives presentations on communications concepts. Provides technical guidance to other personnel concerning data communications requirements. Participates in preparing functional specifications for acquiring commercially available data communications networks.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	14 years
AA/AS	12 years
MA/MS	8 years
Doctorate Degree/Ph.D.	7 years

ANT-078 JR Network Engineer

Minimum/General Experience: This position requires no experience and knowledge of the principles, methods, and techniques used in network administration and engineering plus knowledge of and ability to use relevant hardware, software and other equipment. Certification in specific applications may be required, depending on job assignment.

Functional Responsibility: Performs basic engineering work concerned with the analysis, planning, designing, evaluating, selecting, and upgrading of network systems; performs various tests and documents results; administers and maintains local and wide area networks; provides technical support and troubleshooting to users; configures systems to user environments; assists in telecommunications activities including planning, designing, installing, and maintaining large telecommunications networks; assists in the maintenance and operation of voice, video, and data communications systems; supports the acquisition of hardware and software as well as subcontractor services as needed.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	4 years
AA/AS	2 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-079 Network Engineer

Minimum/General Experience: Must have at least two 2 years' related network design/administration experience. Also requires knowledge of the principles, methods, and techniques used in network administration and engineering plus knowledge of and ability to use relevant hardware, software and other equipment. Certification in specific applications may be required, depending on job assignment

Functional Responsibility: Analyzes local and wide area network systems, including planning, designing, evaluating, selecting, and upgrading operating systems and protocol suites and configuring communication media with concentrators, bridges, and other devices; resolves interoperability problems to obtain operations across all platforms including email, file transfer, multimedia, teleconferencing, and the like; configures systems to user requirements; supports the acquisition of hardware and software as well as subcontractor services as needed; performs various tests and documents results; administers and maintains local and wide area networks; provides technical support and troubleshooting to users; plans network layout design; may administer network security.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-080 Staff Network Engineer

Minimum/General Experience: Must have at least 5 years' related network design/administration experience. Also requires knowledge of the principles, methods, and techniques used in network administration and engineering plus knowledge of and ability to use relevant hardware, software and other equipment. Certification in specific applications may be required, depending on job assignment

Functional Responsibility: Analyzes local and wide area network systems, including planning, designing, evaluating, selecting, and upgrading operating systems and protocol suites and configuring communication media with concentrators, bridges, and other devices; resolves interoperability problems to obtain operations across all platforms including email, file transfer, multimedia, teleconferencing, and the like; configures systems to user requirements; supports the acquisition of hardware and software as well as subcontractor services as needed; performs various tests and documents results; administers and maintains local and wide area networks; provides technical support and troubleshooting to users; plans network layout design; may administer network security; may perform database administration; may provide guidance and training to lower level personnel and serve as technical team or task lead.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-081 SR Network Engineer

Minimum/General Experience: Must have at least eight years' related network design/administration experience. Also must have advanced knowledge of the principles, methods, and techniques used in network administration and engineering plus advanced knowledge of and ability to use relevant hardware, software and other equipment is required.

Functional Responsibility: Analyzes local and wide area network systems, including planning, designing, evaluating, selecting, and upgrading operating systems and protocol suites and configuring communication media with concentrators, bridges, and other devices; resolves interoperability problems to obtain operations across all platforms including email, file transfer, multimedia, teleconferencing, and the like; configures systems to user requirements; supports the acquisition of hardware and software as well as subcontractor services as needed; performs various tests and documents results; administers and maintains local and wide area networks; provides technical support and troubleshooting to users; plans network layout design; may administer network security; may perform database administration; may supervise and direct the work of lower level personnel; may serve as technical team or task lead.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	14 years
AA/AS	12 years
BA/BS	10 years
Doctorate Degree/Ph.D.	7 years

ANT-082 Principal Network Engineer

Minimum/General Experience: Must have at least ten years' related network design/administration experience. Expert knowledge of the principles, methods, and techniques used in network administration and engineering plus expert knowledge of and ability to use relevant hardware, software and other equipment is required.

Functional Responsibility: Provides expert level analysis of local and wide area network systems, including planning, designing, evaluating, selecting, and upgrading operating systems and protocol suites and configuring communication media with concentrators, bridges, and other devices; resolves interoperability problems to obtain operations across all platforms including email, file transfer, multimedia, teleconferencing, and the like; configures systems to user requirements; supports the acquisition of hardware and software as well as subcontractor services as needed; directs various testing and the documentation of results; plans network layout design; may administer network security; may perform database administration; may supervise and direct the work of lower level personnel; serves as technical team or task lead.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	16 years
AA/AS	14 years
BA/BS	12 years
Doctorate Degree/Ph.D.	9 years

ANT-083 Network Administrator

Minimum/General Experience: Requires at least seven years' experience. Also requires knowledge of the principles, methods, and techniques used in network troubleshooting and support as well as knowledge of

operating systems and applications and network management. Must have working knowledge of current technologies and products for Web services and security.

Functional Responsibility: Supports, installs, maintains, troubleshoots, and coordinates the usage of local and wide area networks (LAN and WAN), electronic mail, telecommunications, and PC based systems and related software; evaluates hardware and software, including peripheral, output, and telecommunications equipment; sets up and administers security procedures; troubleshoots problems; recommends and implements LAN policies and procedures and ensures adherence to security procedures; trains users on LAN operations and procedures.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
MA/MS	5 years
Doctorate Degree/Ph.D.	4 years

ANT-084 SR Network Administrator

Minimum/General Experience: Requires eight years' experience and knowledge of the principles, methods, and techniques used in network troubleshooting and support, operating systems and applications and network management. Must have working knowledge of current technologies and products for Web services and security.
Functional Responsibility: Responsible for the planning, design, acquisition, installation, and maintenance of LAN and WAN, electronic mail, telecommunications, and PC based systems and related software; evaluates hardware and software, including peripheral, output, and telecommunications equipment; sets up and administers security procedures; troubleshoots problems; establishes and implements LAN policies and their conformance; coordinates activities of LAN support personnel, providing guidance on common networking issues; assesses vendor products; manages network performance, troubleshoots problems, and maintains network security.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-088 Network/Computer Support Specialist

Minimum/General Experience: Must have at least three years directly related experience in network support. Requires advanced knowledge of the following: principles, methods, and techniques used in network troubleshooting and support; modems, data scopes, patch panels, concentrators, associated terminals, and network management software; Desk Top Operating Systems and Applications. Certification in one or more specific application(s) may be required, depending on job assignment.

Functional Responsibility Installs, configures, and upgrades computer hardware; provides end-user software troubleshooting and support; provides network troubleshooting and support; diagnoses hardware, software and operator problems and corrects them; analyzes IT infrastructure processes and makes recommendations for improvement; involved in IT infrastructure planning; recommends Business Process improvements; leads deployment activities; may provide end-user training; involved in the development of larger Business Applications and Exchange, Web Applications, and Virus Software implementation; may supervise Network/Computer Support Technicians.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	7 years
AA/AS	5 years
MA/MS	1 years
Doctorate Degree/Ph.D.	0 years

ANT-089 Computer System/Network Integration Engineer

Minimum/General Experience: Received certification level training in proprietary product network operating system or integration tools and at least one year experience in computer system/network engineering and/or technical subject specialization, or; 4 or more years experience in computer system/network engineer and/or technical subject specialization. Two more years experience within a specific field of technology related to computer systems integration/network integration administration or security and/or a specific technical subject specialization.

Functional Responsibility: Performs system and network analysis, design and administration. Designs computer and communications architectures, provides timely technical support, and designs hardware/software solutions for communications

architectures.

ANT-092 SR Telecommunications Analyst

Minimum/General Experience: Most have at least three years' directly related experience in telecommunications systems design and support. Must also have advanced knowledge of the fundamental concepts used in telecommunications systems administration and support as well as relevant hardware and software systems.

Functional Responsibility: Evaluates, designs, and maintains existing or proposed telecommunications systems; analyzes the telecommunications needs of the user and recommends solutions; designs, develops, and tests telecommunications software solutions; prepares detailed specifications and flow charts for implementation of new internal programs or modification to vendor software; coordinates installation of equipment; monitors the operations of telecommunications systems and services of vendors; provides end user training of telecommunications features and functionality; may provide guidance and technical training to lower level analysts.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	5 years
BA/BS	1 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-093 Communications Network Manager

Minimum/General Experience: Must have at least six years' experience, of which at least three years are specialized. Specialized experience includes: supervising the operation and maintenance of communications network systems. General experience includes all aspects of communications networks.

Functional Responsibility: Schedules conversions and cutovers. Oversees network control center. Supervises maintenance of systems. Coordinates with all responsible users and sites. Supervises staff.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	10 years
AA/AS	8 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-102 Hardware Specialist

Minimum/General Experience: Must have at least five years' progressive experience in systems analysis with three years' intensive and progressive specific experience in the specialty.

Functional Responsibility: Determines feasible hardware alternatives in client server environments. Reviews computer systems in terms of capabilities and makes recommendations for improved utilization. Prepares or directs preparation of reports concerning hardware. Prepares or participates in preparing functional requirements and specifications for hardware acquisitions.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-103 Quality Assurance/IV&V Analyst

Minimum/General Experience: Must have at least two years' related experience in quality assurance and/or software engineering. Must also have experience with Independent Validation and Verification (IV&V) and system configuration.

Functional Responsibility: Assists in the review and evaluation of software products and systems to ensure adherence to customer quality standards; develops software/systems testing procedures and conducts tests; analyzes and documents IV&V issues; presents IV&V results; works under general supervision.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-104 Quality Assurance/IV&V Specialist

Minimum/General Experience: Must have at least four years' experience of which two years must be specialized. Specialized experience includes:

Configuration Management, IV&V, software testing and integration, software metrics and their application to software quality assessment. General experience includes increasing responsibilities in quality assurance, quality control and IV&V.

Functional Responsibility: Assists in the evaluation of software and associated documentation. Participates in formal and informal reviews to determine quality; presents IV&V results and troubleshoots technical problems; makes recommendations to improve overall quality.
Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	8 years
AA/AS	6 years
MA/MS	2 years
Doctorate Degree/Ph.D.	1 years

ANT-105 Quality Assurance/IV&V Manager

Minimum/General Experience: Must have at least seven years of engineering and/or system analysis and programming experience, including four years of quality assurance, IV&V or system configuration experience.

Functional Responsibility: Organizes and maintains all quality assurance and IV&V documentation required. Responsible for ensuring compliance with recognized standards and practices. Reviews all documentation for completeness, accuracy, and correctness. Supports the test and integration personnel as a witness to testing requirements; presents IV&V results and troubleshoots technical problems; makes recommendations to improve overall quality. Certifies that deliverables have met all quality requirements.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
MA/MS	5 years
Doctorate Degree/Ph.D.	4 years

ANT-108 Configuration Management Specialist

Minimum/General Experience: Must have five years of engineering and/or system analysis and programming experience, including two years of configuration management experience.

Functional Responsibility: Responsible for configuration management activities including product identification, change control, status accounting, operation of the program support library, and development and monitoring of equipment/system acceptance plans. Evaluates and selects configuration management tools and standards. Coordinates with users and systems development personnel on releases of both system-level software and applications software. Verifies the completeness and accuracy of release libraries before implementation and ensures that correct versions of programs are included in specified releases. Prepares configuration management plans and procedures. Responsible for configuration management of requirements, design, and code. Operates and manages program support library. Monitors library structure and procedures to assure system integrity, including procedures for collection, release, production, test, and emergency libraries and the movement/migration of components between libraries. Monitors end-item acceptance plans. Will supervise lower level personnel. Must have demonstrated capability for oral and written communications.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-109 SR Configuration Management Specialist

Minimum/General Experience: Must have at least seven years' directly related experience in configuration management and support. Must also have advanced knowledge of the principles, methods, and techniques used in configuration management and support as well as knowledge and familiarity with Configuration Management software support packages commonly utilized in project management. Must be able to supervise and direct the work of others and have the ability to serve as a technical team or task lead.

Functional Responsibility: Conducts periodic site inventory in order to create and maintain inventories of equipment, software, and/or systems; prepares, maintains and inventories associated technical drawings for assigned projects; researches data, and creates and maintains inventory and other databases for assigned projects; prepares configuration change requests and verifies, tracks, and documents configuration changes; performs logistic-related tasks like shipping/receiving, tracking, and disposal of equipment, software, and/or systems; coordinates equipment/software utilization among individual users; provides documentation support for assigned projects;

performs quality assurance checks on drawings prepared by other configuration management specialists; may serve as a team or task lead; may supervise and direct the work of other configuration management specialists; provides training on configuration management processes, software, and/or systems.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
MA/MS	5 years
Doctorate Degree/Ph.D.	4 years

ANT-111 Training Specialist/Instructor

Minimum/General Experience: Must have four years' experience in information systems development, training, or related fields. Must have two years specialized experience. Specialized experience includes: experience in developing and providing IT and end-user training on computer hardware and application software. General experience includes information systems development, training, or related fields. Demonstrated ability to communicate orally and in writing.

Functional Responsibility: Conducts the research necessary to develop and revise training courses. Develops and revises these courses and prepares appropriate training catalogs. Prepares all instructor materials (course outline, background material, and training aids). Prepares all student materials (course manuals, workbooks, handouts, completion certificates, and course critique forms). Trains personnel by conducting formal classroom courses, workshops and seminars.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	8 years
AA/AS	6 years
MA/MS	2 years
Doctorate Degree/Ph.D.	1 years

ANT-112 SR Training Specialist/Instructor

Minimum/General Experience: Must have six years' experience in information systems development, training, or related fields, with at least three years experience developing and providing IT and end-user training on computer hardware and application software.

Functional Responsibility: Conducts the research necessary to develop and revise training courses and prepares appropriate training catalogs. Prepares all instructor materials (course outline, background material, and training aids). Prepares all student materials (course manuals, workbooks, handouts, completion certificates, and course critique forms). Trains personnel by conducting formal classroom courses, workshops, and seminars. Provides daily supervision and direction to staff.
Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	10 years
AA/AS	8 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-114 Training Specialist

Minimum/General Experience: Requires at least three years' directly related experience in the design and development of training programs. Also requires knowledge of the principles, methods, and techniques used in the design and development of computer-based training programs as well as relevant hardware/software and computer equipment as required. Must be able to present training programs to users and serve as a technical team led.

Functional Responsibility: Designs training objectives; develops computer-based training programs for assigned software; designs courseware and structures training classes; creates lesson text; provides documentation for software training; designs program authoring systems; creates final version of training programs; presents training programs to users; designs program flowcharts; may serve as a team lead.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	5 years
BA/BS	1 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-115 SR Training Specialist

Minimum/General Experience: Requires at least seven years' directly related experience in the design, development, testing, and implementation of computer-based training programs. Also requires thorough knowledge of the principles, methods, and techniques used in the design, development, testing, and implementation of computer-based training

programs; knowledge of relevant hardware/software and computer equipment as required. Must be able to present training programs and evaluate effectiveness of training and serve as a team or task lead.

Functional Responsibility: Defines training requirements and analyzes system software changes; develops computer-based training objectives and methodologies; coordinates with subject matter experts to design training strategy; designs courseware, including structuring training classes; creates lesson text; provides documentation for software training; tests training programs and edits for effectiveness, creates final version; designs program authoring systems; presents training programs to users, validates and evaluates training effectiveness; designs program flowcharts; may develop multi-media training as required; conducts research into new training, educational, and multimedia technologies; may serve as a team or task lead.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	9 years
BA/BS	5 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-116 Principal Training Specialist

Minimum/General Experience: Requires at least ten years' related experience in instructional development. Also requires advanced knowledge of the principles, methods, and techniques used in technology-based training as well as the use and application of off-the-shelf tools and associated equipment and systems.

Functional Responsibility: Designs and develops instructional approaches and/or strategies to meet training requirements; conducts analysis of training requirements and media requirements; develops appropriate training objectives and test methods and designs instructionally valid training materials; ensures integrity of task analysis, training requirements, training hierarchies, instructional materials, and evaluation plans; designs and develops computer-based training, web-based training, electronic performance support systems and other technology-based learning solutions; develops flow diagrams and story boards; designs instructionally sound lessons in a variety of delivery media; interacts with customer and subject matter experts to ensure technical accuracy of instructional content. Also provides guidance and work leadership to lower-level personnel and may serve as technical team or task lead.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	12 years
BA/BS	8 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-119 Testing and Validation Specialist

Minimum/General Experience: Requires no experience and knowledge of the principles, methods, and techniques used in analysis and assessment as well as the use and application of related off-the-shelf tools.

Functional Responsibility: Designs and develops assessment instruments and/or strategies to meet training requirements; conducts analysis of training requirements (needs, job, task analysis); interviews subject matter experts or incumbents to collect information; develops relevant and measurable assessment criteria, standards, and methodologies; designs reliable and valid assessment materials; gathers data and compiles information into documents related to assessment.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	4 years
AA/AS	2 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-121 Principal Testing and Validation Specialist

Minimum/General Experience: Requires at least five years' related experience in educational psychology, industrial/organizational psychology, testing, psychometrics, or instructional media/technology. Also requires advanced knowledge of the principles, methods, and techniques used in analysis and assessment as well as the use and application of related off-the-shelf tools. Must have the ability to provide work leadership and supervision to assigned staff.

Functional Responsibility: Designs and develops assessment instruments and/or strategies to meet training requirements; conducts analysis of training requirements (needs, job, task analysis); interviews subject matter experts or incumbents to collect information; develops relevant and measurable assessment criteria, standards, and methodologies; designs reliable and valid assessment materials; prepares reports and technical documentation related to assessment; works on complex analysis or test

development projects. Serves as a technical team/task lead and may have supervisory responsibility.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
BA/BS	7 years
Doctorate Degree/Ph.D.	4 years

ANT-123 Instructional System Designer

Minimum/General Experience: Requires at least two years' related experience in instructional development. Also requires knowledge of the principles, methods, and techniques used in technology-based training as well as the use and application of off-the-shelf tools and associated equipment and systems.

Functional Responsibility: Designs and develops instructional approaches and/or strategies to meet training requirements; conducts analysis of training requirements and media requirements; develops appropriate training objectives and test methods and designs instructionally valid training materials; ensures integrity of task analysis, training requirements, training hierarchies, instructional materials, and evaluation plans; designs and develops computer based training, web-based training, electronic performance support systems and other technology-based learning solutions; develops flow diagrams and story boards; designs instructionally sound lessons in a variety of delivery media; interacts with customer and subject matter experts to ensure technical accuracy of instructional content.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-124 SR Instructional System Designer

Minimum/General Experience: Requires at least five years' related experience in instructional development as well as thorough knowledge of the principles, methods, and techniques used in technology-based training and use and application of off-the-shelf tools and associated equipment and systems.

Functional Responsibility: Designs and develops instructional approaches and/or strategies to meet training requirements; conducts analysis of training requirements and media requirements; develops appropriate training objectives and test methods and designs instructionally valid training materials; ensures integrity of task analysis, training requirements, training hierarchies, instructional materials, and evaluation plans; designs and develops computer based training, web-based training, electronic performance support systems and other technology-based learning solutions; develops flow diagrams and story boards; designs instructionally sound lessons in a variety of delivery media; interacts with customer and subject matter experts to ensure technical accuracy of instructional content; may provide guidance and work leadership to lower-level personnel.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
BA/BS	7 years
Doctorate Degree/Ph.D.	4 years

ANT-128 Staff Graphics Design Specialist

Minimum/General Experience: Requires at least five years' directly related experience in graphics design. Also requires knowledge of the principles, methods, and techniques used in the preparation of graphics material and associated software and equipment. Requires experience using graphics software programs.

Functional Responsibility: Performs a wide variety of graphics/illustration activities to produce brochures, briefings, displays, and other materials; involved in all aspects of graphics/illustration projects from conceptualization and development to final presentation; may act as a technical consultant on matters of design, composition and methods of presenting technical data; uses a broad range of graphics production software and equipment; exercises creative judgment and originality by translating needs into graphics capabilities; may participate in website design.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	7 years
BA/BS	3 years
MA/MS	1 years
Doctorate Degree/Ph.D.	0 years

ANT-129 SR Graphics Design Specialist

Minimum/General Experience: Requires at least eight years' directly related experience in graphics design. Knowledge of the principles, methods, and techniques used in the preparation of graphics materials as well as knowledge of the associated software and equipment and in-depth knowledge of graphics software programs.

Functional Responsibility: Performs high-level computer graphic design activities to produce brochures, briefings, displays, and other materials; involved in all aspects of graphics/illustration projects from conceptualization and development to final presentation; may act as a technical consultant on matters of design, composition and methods of presenting technical data; uses a broad range of graphics production software and equipment; exercises creative judgment and originality by translating needs into graphics capabilities; may participate in website design; provides technical training and guidance to lower-level graphics personnel and may act as a team or task lead.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	10 years
BA/BS	6 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-130 Principal Graphics Design Specialist

Minimum/General Experience: Requires at least nine years' directly related experience in graphics design. Also requires knowledge of the principles, methods, and techniques used in the preparation of graphics materials and associated software and equipment and an in-depth knowledge of graphics software programs. Requires the ability to supervise and direct the work of others.

Functional Responsibility: Provides full supervision and training for graphic design personnel, directing the production of graphics projects from design through final presentation; acts as a technical consultant on matters of design, composition and methods of presenting technical data; uses a broad range of graphics production software and equipment; exercises creative judgment and originality by translating needs into graphics capabilities; may participate in website design; acts as a team or task lead.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	11 years
BA/BS	7 years
MA/MS	5 years
Doctorate Degree/Ph.D.	4 years

ANT-133 Contract Administrator

Minimum/General Experience: Requires at least two years' related experience in contracts administration. Also requires thorough knowledge of the practices, procedures, and processes of contracts administration as well as relevant laws, regulations, terms, conditions, and policies governing assigned contracts.

Functional Responsibility: Performs all duties of contract administration, including negotiation, correspondence, documentation, certification, financial reporting, and product delivery; implements subcontract administration procedures; negotiates contract terms from proposal stage to project close-out in accordance with relevant regulations; prepares and submits proposals including pricing and scheduling details and coordination of requirements; prepares consulting agreements; modifies contract schedules and participates in vendor reseller agreement negotiations when required; ensures timely processing of technical reports and deliverables; collects data for clients as requested

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-134 SR Contract Administrator

Minimum/General Experience: Requires at least five years' related experience in contracts administration. Also requires advanced knowledge of the practices, procedures, and processes of contracts administration as well as thorough knowledge of relevant laws, regulations, terms, conditions, and policies governing assigned contracts including Federal Acquisition Regulations (FAR) and labor law.

Functional Responsibility: Performs all duties of contract administration, including negotiation, correspondence, documentation, certification, financial reporting, and product delivery for complex contracts; implements subcontract administration procedures; negotiates contract terms from proposal stage to project close-out in accordance with relevant regulations; coordinates approval of negotiations, contracts, and subcontracts with appropriate management staff; provides advice and interpretation of contract requirements; reviews solicitation requests

to ensure compliance with terms and conditions; prepares and submits cost proposals including pricing and scheduling details, coordination of requirements, and cost proposal risk assessment; prepares responses to certifications and representations; prepares consulting agreements; modifies contract schedules and participates in vendor reseller agreement negotiations when required; ensures timely processing of technical reports and deliverables; coordinates with program managers to ensure contract requirements are fulfilled; collects data for clients as requested; may provide work leadership to lower level contracts personnel.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-137 Program Management Specialist

Minimum/General Experience: Requires at least three years' related administrative experience. Also requires demonstrated effective organizational skills and knowledge of word processing, spreadsheet, and/or other pertinent software applications.

Functional Responsibility: Responsible for management, performance and completion of projects associated with a contract program; collects and evaluates data for monitoring development and life-cycle requirements of various programs and systems; creates program cost estimates to support program cost/schedule/technique audits or to generate budget submissions; manages program staff; prepares management plans, budgets and schedules; uses and develops CPM and PERT evaluation techniques; uses computer programs and models to track program data; maintains contact with customer to ensure conformance to customer requirements.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	7 years
AA/AS	5 years
MA/MS	1 years
Doctorate Degree/Ph.D.	0 years

ANT-138 SR Program Management Specialist

Minimum/General Experience: Requires at least six years' related administrative experience. Also requires demonstrated effective organizational skills and knowledge of word processing, spreadsheet, and/or other pertinent software applications.

Functional Responsibility: Responsible for management, performance and completion of significant projects associated with a contract program; collects and evaluates data for monitoring development and life-cycle requirements of various programs and systems; creates program cost estimates to support program cost/schedule/technique audits or to generate budget submissions; manages and coordinates projects of considerable scope and magnitude; manages program staff; oversees the development of design concepts and test criteria; prepares management plans, budgets and schedules; uses and develops CPM and PERT evaluation techniques; uses computer programs and models to track program data; maintains contact with customer to ensure conformance to customer requirements.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	10 years
AA/AS	8 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-139 Principal Program Management Specialist

Minimum/General Experience: Requires at least eight years' related administrative experience. Also requires demonstrated management and organizational skills and knowledge of word processing, spreadsheet, and/or other pertinent software applications.

Functional Responsibility: Responsible for management, performance and completion of major projects associated with a contract program; collects and evaluates data for monitoring development and life-cycle requirements of various programs and systems; creates program cost estimates to support program cost/schedule/technique audits or to generate budget submissions; manages and directs, with full authority, all phases of a program from inception to completion; manages program staff; oversees the development of design concepts and test criteria; reviews project and program schedules and plans and reports on alternative courses of action and potential impacts; directs, prepares and coordinates proposal preparation, management plans, budgets and schedules; uses and develops CPM and PERT evaluation techniques; uses computer programs and models to track program data; maintains contact with customer to ensure conformance to customer requirements.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-148 SR Documentation Specialist

Minimum/General Experience: Requires at least eight years' directly related experience in the research, preparation, and writing of technical and marketing materials. Also requires thorough knowledge of the principles and practices of technical research, writing, and editing as well as word-processing, desk-top publishing, and web applications and computer equipment.

Functional Responsibility: Collects and organizes information required for preparation of user's manuals, training materials, installation guides, and reports at a complex level; researches and learns the assigned system; interviews key personnel; writes materials; performs detailed edits of contract deliverables, proposals, brochures, press releases, and other materials to ensure technical accuracy, consistency, and adherence to specified content and format; participates in the writing, design, and development of marketing brochures, advertisements, news releases, feature articles, conference programs and proceedings, public relations announcements, newsletters, and other materials; designs, develops, produces, maintains, and manages client web sites as assigned; rewrites technical materials and coordinates with technical personnel to ensure accuracy; compiles and collects information for the preparation of technical proposals;
Creates multi-media presentation materials, including slides; may participate in the coordination of and attend various conferences and meetings; may serve as a team lead.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	10 years
BA/BS	6 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-150 Technical Editor

Minimum/General Experience: Must have at least five years' directly related experience in the research and preparation of technical materials. Also requires knowledge of the principles and practices of technical research, writing, and editing, as well as word-processing and desktop publishing applications and computer equipment as required.

Functional Responsibility: Prepares and edits a wide variety of complex technical materials for publication, including user's manuals, training materials, installation guides, proposals, and reports; reviews, researches, and edits information for preparation of contract deliverables; provides support to the creation of proposals and multi-media presentation materials, including slides; responsible for the coordination of multiple aspects of document publication; participates in the design and development of marketing brochures, conference programs and proceedings, public relations announcements, and other materials when requested; may supervise and direct the work of word processing, graphics and/or technical writing staff; coordinates and attends various conferences and meetings; plans budgets, schedules and priority of work for publications projects.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT—158 Imagery Analyst

Minimum/General Experience: Two years of related experience supporting statistics/data analysis and programming in data analytical language. Knowledge of the principles, methods, and techniques used in statistical analysis. Knowledge of the principles, methods, and techniques used in database management. Ability to prepare and present technical research specific certifications or military education/training may be required, depending on job assignment.

Functional Responsibility: Provides analysis and research for national security, infrastructure, technology, country, geographic area, biographic and targeted vulnerability. Prepares assessments of current threats and trends based on the sophisticated collection, research and analysis of classified and open source information within Earth Observation Services. Assists with development of analytical procedures to meet changing requirements and ensure maximum operational success. Collects data using a combination of standard intelligence methods and business processes. Performs data collection, analysis, interpretation, and management duties. Prepares presentations that reflect the results of the

data analysis. Works with scientists and other technical experts to design and develop statistical analyses methodologies. Maintains current knowledge of relevant technologies and subject areas. Participates in special projects as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT- 159 Imagery Sr. Analyst

Minimum/General Education: 5 years of related experience supporting statistics/data analysis and programming in data analytical language. Comprehensive knowledge of the principles, methods, and techniques used in statistical analysis. Comprehensive knowledge of the principles, methods, and techniques used in database management. Experience preparing and presenting technical research specific certifications or military education/training may be required, depending on job assignment.

Functional Responsibilities: Provides analysis and research for national security, infrastructure, technology, country, geographic area, biographic and targeted vulnerability. Prepares assessments of current threats and trends based on the sophisticated collection, research and analysis of classified and open source information. Develops and maintains analytical procedures to meet changing requirements and ensure maximum operational success within Earth Observation Services. Collects data using a combination of standard intelligence methods and business processes. Performs and manages data collection, analysis, interpretation, and management duties. Prepares presentations that reflect the results of the data analysis. Provides data-related training to staff. Coordinates with scientists and other technical experts to design and develop statistical analyses methodologies. May provide guidance and work leadership to less-experienced staff. Maintains current knowledge of relevant technologies and subject areas. Participates in special projects as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-160 Imagery Principal Analyst

Minimum/General Education: 8 years of related experience supporting statistics/data analysis and programming in data analytical language. Provides and manages analysis and research for national security, infrastructure, technology, country, geographic area, biographic and targeted vulnerability. Advanced knowledge of the principles, methods, and techniques used in statistical analysis. Advanced knowledge of the principles, methods, and techniques used in database management within Earth Observation Services Experience preparing and presenting technical research specific certifications or military education/training may be required, depending on job assignment.

Functional Responsibility: Prepares and reviews assessments of current threats and trends based on the sophisticated collection, research and analysis of classified and open source information. Develops, supervises, and maintains analytical procedures to meet changing requirements and ensure maximum operational success. Oversees the collection of data using a combination of standard intelligence methods and business processes. Manages data collection, analysis, interpretation, and management duties. Delivers presentations that reflect the results of the data analysis. Develops and provides data-related training to staff. Coordinates with scientists and other technical experts to design and develop statistical analyses methodologies. Provides guidance and work leadership to less-experienced staff. Maintains current knowledge of relevant technologies and subject areas. Participates in special projects as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

A**NT-161 Imagery Sr. Principal Analyst**

Minimum/General Experience: Minimum of 20 years of related GEOINT experience with Service or

National Agency requirements. Plans and executes broad imagery exploitation requirements. Provides remotely sensed imagery analysis and research for national security, infrastructure, technology, country, geographic area, and targeted vulnerability. Understands and can exploit GEOINT data from active sensors such as synthetic aperture RADAR (SAR) and light detection and ranging (LIDAR). Masters' Degree in Geospatial Sciences, Intelligence, Geography or the equivalent and 10 years' experience processing and exploiting remotely sensed imagery. Expert knowledge of the principles, methods, and techniques used in statistical analysis within Earth Observation Services. Advanced knowledge of the principles, methods, and techniques used in database management. Expert experience preparing and presenting technical research specific certifications or military education/training may be required, depending on job assignment.

Functional Responsibilities: Conducts Multi-INT research, populates intelligence databases, and produces written, graphic, and oral intelligence products. Prepares expert assessments of current threats and trends based on sophisticated GEOINT collection, research, and analysis of classified and unclassified imagery. Understands the DOD and Intelligence Community (IC) reporting and classification standards. Develops and maintains remotely sensed imagery analytical procedures to meet changing requirements and ensure maximum operational success. Builds expert level Advanced Geospatial Intelligence (AGI) collection requirements to answer intelligence requirements. Performs and manages data collection, analysis, interpretation, and management duties. Provides GEOINT related training to staff. Coordinates with physical and imagery scientists and other technical experts to design and develop statistical analyses. May provide guidance and work leadership to less-experienced staff. Maintains current knowledge of relevant technologies and subject areas. Participates in special projects as required.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	26 years
AA/AS	24 years
BA/BS	22 years
Doctorate Degree/Ph.D.	19 years

ANT-162 Geospatial Analyst

Minimum/General Experience: 2 years of related experience supporting statistics/data analysis and programming in data analytical language. Knowledge of the principles, methods, and techniques used in statistical analysis within Earth Observation Services. Knowledge of the principles, methods, and techniques used in database management. Ability to prepare and present technical research. Specific certifications or military education/training may be required, depending on job assignment.

Functional Responsibilities: Provides analysis and research for national security, infrastructure, technology, country, geographic area, biographic and targeted vulnerability. Prepares assessments of current threats and trends based on the sophisticated collection, research and analysis of classified and open source information. Assists with development of analytical procedures to meet changing requirements and ensure maximum operational success. Collects data using a combination of standard intelligence methods and business processes. Collects data using a combination of standard intelligence methods and business processes. Performs data collection, analysis, interpretation, and management duties. Prepares presentations that reflect the results of the data analysis. Works with scientists and other technical experts to design and develop statistical analyses methodologies. Maintains current knowledge of relevant technologies and subject areas. Participates in special projects as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-163 Geospatial Sr. Analyst

Minimum/General Experience: 5 years of related experience supporting statistics/data analysis and programming in data analytical language. Comprehensive knowledge of the principles, methods, and techniques used in statistical analysis within Earth Observation Services. Comprehensive knowledge of the principles, methods, and techniques used in database management. Experience preparing and presenting technical research. Specific certifications or military education/training may be required, depending on job assignment.

Functional Responsibilities: Provides analysis and research for national security, infrastructure, technology, country, geographic area, biographic and targeted vulnerability. Prepares assessments of current threats and trends based on the sophisticated collection, research and analysis of classified and open source information. Develops and maintains analytical procedures to meet changing requirements and ensure maximum operational success. Collects data using a combination of standard intelligence methods and business processes. Performs and manages data collection, analysis, interpretation, and management duties. Prepares presentations that reflect the results of the data analysis. Provides data-related training to staff. Coordinates with scientists and other technical experts to design and develop statistical analyses methodologies. May provide guidance and work leadership to less-experienced staff. Maintains current knowledge of relevant technologies and subject areas. Participates in special projects as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-164 Principal Geospatial Analyst

Minimum/General Experience: Requires 8 years of related experience supporting statistics/data analysis and programming in data analytical language. Bachelor's degree in Computer Science, Statistics, Geography or a related technical or military discipline or the equivalent combination of education, professional training, or work/military experience.

Functional Responsibility: Provides analysis and manages research methods for national security, infrastructure, technology, country, geographic area, biographic and targeted vulnerability within the GEOINT environment. Prepares and reviews assessments of current threats and trends based on the sophisticated collection, research and analysis of classified and open source information. Develops and maintain rules and methodologies for analytical procedures to meet changing requirements and ensure maximum operational success. Oversees the collection of data using a combination of standard intelligence methods and business processes. Performs data collection, analysis, interpretation and management duties; delivers presentations that reflect the results of the data analysis and provides data-related training to staff. Coordinates with scientists and other technical experts to design and develop statistical analyses methodologies. Provides guidance and work leadership to less-experienced staff. Maintains current knowledge of relevant technologies and subject areas. Participates in special projects as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-165 Geospatial Sr. Principal Analyst

Minimum/General Experience: Minimum of 20 years of related GEOINT experience with Service or National Agency requirements. Masters' Degree in Geospatial Sciences, Intelligence, Geography or the equivalent and 10 years' experience processing and exploiting remotely sensed imagery. Expert knowledge of the principles, methods, and techniques used in statistical analysis within Earth Observation Services. Expert knowledge of the principles, methods, and techniques used in database management. Experience preparing and presenting technical research. Specific certifications or military education/training may be required, depending on job assignment.

Functional Responsibilities: Provides analysis and research for national security, infrastructure, technology, country, geographic area, biographic and targeted vulnerability. Delivers assessments of current threats and trends based on the sophisticated collection, research and analysis of classified and open source information. Develops and supervises analytical procedures to meet changing requirements and ensure maximum operational success. Supervises collection of data using a combination of standard intelligence methods and business processes. Performs data collection, analysis, interpretation and management duties. Delivers presentations and maintains digital Geospatial Services that reflect the results of the data analysis. Understands the DOD and Intelligence Community (IC) reporting and classification standards. Develops and maintains remotely sensed imagery analytical procedures to meet changing requirements and ensure maximum operational success. Develops and

provides data-related training to staff. Coordinates with scientists and other technical experts to design and develop statistical analyses methodologies. Provides guidance and work leadership to less-experienced staff. Maintains current knowledge of relevant technologies and subject areas of staff. Participates in special projects as required.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	26 years
AA/AS	24 years
BA/BS	22 years
Doctorate Degree/Ph.D.	19 years

IT PROFESSIONAL SERVICES - RATES
Service Rates Applicable for SIN 54151S, IT Professional Services

Cat #	Category Name	Contract Year 5 GSA Price with IFF (11/21/18 to 11/20/19)	Contract Year 6 GSA Price with IFF (11/21/19 to 11/20/20)	Contract Year 7 GSA Price with IFF (11/21/20 to 11/20/21)	Contract Year 8 GSA Price with IFF (11/21/21 to 11/20/22)	Contract Year 9 GSA Price with IFF (11/21/22 to 11/20/23)	Contract Year 10 GSA Price with IFF (11/21/23 to 11/20/24)
ANT-001	Technical Expert 5	$ 102.75	$ 104.94	$ 107.19	$ 109.48	$ 111.83	$ 114.22
ANT-002	Technical Expert 4	$ 116.60	$ 119.09	$ 121.64	$ 124.24	$ 126.90	$ 129.62
ANT-003	Technical Expert 3	$ 168.37	$ 171.97	$ 175.65	$ 179.41	$ 183.25	$ 187.17
ANT-004	Technical Expert 2	$ 206.61	$ 211.03	$ 215.54	$ 220.16	$ 224.87	$ 229.68
ANT-005	Technical Expert 1	$ 304.54	$ 311.06	$ 317.72	$ 324.52	$ 331.46	$ 338.56
ANT-006	Project Manager/Task Lead	$ 124.61	$ 127.28	$ 130.00	$ 132.79	$ 135.63	$ 138.53
ANT-007	Program Manager	$ 136.72	$ 139.64	$ 142.63	$ 145.68	$ 148.80	$ 151.98
ANT-008	Sr. Program Manager	$ 167.36	$ 170.94	$ 174.60	$ 178.34	$ 182.15	$ 186.05
ANT-009	Proprietary Prod Application Developer	$ 120.25	$ 122.82	$ 125.45	$ 128.13	$ 130.88	$ 133.68
ANT-010	Proprietary Prod Application Designer	$ 120.25	$ 122.82	$ 125.45	$ 128.13	$ 130.88	$ 133.68
ANT-011	Proprietary Prod Database Admin	$ 115.85	$ 118.33	$ 120.86	$ 123.45	$ 126.09	$ 128.79
ANT-012	Proprietary Prod System Architect	$ 117.42	$ 119.93	$ 122.50	$ 125.12	$ 127.80	$ 130.53
ANT-013	Business Process Reengineering Analyst	$ 99.37	$ 101.49	$ 103.67	$ 105.88	$ 108.15	$ 110.46
ANT-015	Scientist	$ 89.51	$ 91.42	$ 93.38	$ 95.38	$ 97.42	$ 99.50
ANT-016	Staff Scientist	$ 114.70	$ 117.15	$ 119.66	$ 122.22	$ 124.83	$ 127.50
ANT-017	Sr. Scientist	$ 137.49	$ 140.44	$ 143.44	$ 146.51	$ 149.65	$ 152.85
ANT-018	Principal Scientist	$ 168.23	$ 171.83	$ 175.51	$ 179.26	$ 183.10	$ 187.02
ANT-019	Sr. Principal Scientist	$ 195.16	$ 199.33	$ 203.60	$ 207.96	$ 212.41	$ 216.95
ANT-023	Jr. Systems Engineer	$ 76.89	$ 78.54	$ 80.22	$ 81.93	$ 83.69	$ 85.48
ANT-024	Systems Engineer	$ 93.49	$ 95.49	$ 97.53	$ 99.62	$ 101.75	$ 103.93
ANT-025	Staff Systems Engineer	$ 115.17	$ 117.64	$ 120.16	$ 122.73	$ 125.35	$ 128.04
ANT-026	Sr. Systems Engineer	$ 122.43	$ 125.05	$ 127.73	$ 130.46	$ 133.25	$ 136.10
ANT-027	Principal Systems Engineer	$ 128.88	$ 131.64	$ 134.46	$ 137.34	$ 140.28	$ 143.28
ANT-028	Sr. Principal Systems Engineer	$ 172.79	$ 176.49	$ 180.27	$ 184.12	$ 188.06	$ 192.09
ANT-029	Information Engineer	$ 117.42	$ 119.93	$ 122.50	$ 125.12	$ 127.80	$ 130.53
ANT-030	Sr. Information Engineer	$ 129.59	$ 132.36	$ 135.20	$ 138.09	$ 141.04	$ 144.06
ANT-031	Principal Information Engineer	$ 153.77	$ 157.06	$ 160.42	$ 163.86	$ 167.36	$ 170.94
ANT-032	Jr. Software Engineer	$ 74.47	$ 76.06	$ 77.69	$ 79.35	$ 81.05	$ 82.79
ANT-033	Software Engineer	$ 87.46	$ 89.33	$ 91.24	$ 93.20	$ 95.19	$ 97.23
ANT-034	Staff Software Engineer	$ 98.56	$ 100.67	$ 102.83	$ 105.03	$ 107.28	$ 109.57
ANT-035	Sr. Software Engineer	$ 123.04	$ 125.67	$ 128.36	$ 131.11	$ 133.91	$ 136.78
ANT-036	Principal Software Engineer	$ 172.48	$ 176.17	$ 179.94	$ 183.79	$ 187.73	$ 191.74
ANT-037	Software Architect	$ 161.09	$ 164.54	$ 168.06	$ 171.66	$ 175.33	$ 179.08
ANT-038	Computer Security Specialist	$ 98.07	$ 100.17	$ 102.32	$ 104.51	$ 106.74	$ 109.03
ANT-039	Sr. Computer Security Specialist	$ 138.02	$ 140.97	$ 143.99	$ 147.07	$ 150.22	$ 153.43
ANT-040	Jr. Database Architect	$ 78.59	$ 80.27	$ 81.99	$ 83.74	$ 85.53	$ 87.36
ANT-041	Database Architect	$ 87.36	$ 89.22	$ 91.13	$ 93.08	$ 95.08	$ 97.11
ANT-042	Sr. Database Architect	$ 110.47	$ 112.83	$ 115.25	$ 117.72	$ 120.23	$ 122.81
ANT-045	Computer Programmer/Analyst	$ 78.71	$ 80.39	$ 82.11	$ 83.87	$ 85.66	$ 87.50

Cat #	Category Name	Contract Year 5 GSA Price with IFF (11/21/18 to 11/20/19)	Contract Year 6 GSA Price with IFF (11/21/19 to 11/20/20)	Contract Year 7 GSA Price with IFF (11/21/20 to 11/20/21)	Contract Year 8 GSA Price with IFF (11/21/21 to 11/20/22)	Contract Year 9 GSA Price with IFF (11/21/22 to 11/20/23)	Contract Year 10 GSA Price with IFF (11/21/23 to 11/20/24)
ANT-046	Staff Computer Programmer/Analyst	$ 110.69	$ 113.06	$ 115.48	$ 117.95	$ 120.47	$ 123.05
ANT-047	Sr. Computer Programmer/Analyst	$ 114.30	$ 116.75	$ 119.25	$ 121.80	$ 124.41	$ 127.07
ANT-048	Principal Computer Programmer/Analyst	$ 134.29	$ 137.17	$ 140.10	$ 143.10	$ 146.16	$ 149.29
ANT-049	Computer Systems Programmer	$ 106.10	$ 108.37	$ 110.69	$ 113.06	$ 115.47	$ 117.95
ANT-050	Web Designer	$ 77.77	$ 79.44	$ 81.14	$ 82.87	$ 84.64	$ 86.46
ANT-051	Web Developer	$ 90.55	$ 92.48	$ 94.46	$ 96.48	$ 98.55	$ 100.66
ANT-052	Sr. Web Developer	$ 123.30	$ 125.94	$ 128.63	$ 131.39	$ 134.20	$ 137.07
ANT-053	Web Tech Administrator	$ 89.15	$ 91.05	$ 93.00	$ 94.99	$ 97.02	$ 99.10
ANT-054	Web Content Manager	$ 87.28	$ 89.14	$ 91.05	$ 93.00	$ 94.99	$ 97.02
ANT-055	Web Security Administrator	$ 87.44	$ 89.31	$ 91.22	$ 93.17	$ 95.17	$ 97.20
ANT-057	Computer Systems Analyst	$ 87.85	$ 89.73	$ 91.65	$ 93.61	$ 95.62	$ 97.66
ANT-058	Staff Computer Systems Analyst	$ 102.80	$ 105.00	$ 107.25	$ 109.54	$ 111.89	$ 114.28
ANT-059	Sr. Computer Systems Analyst	$ 117.54	$ 120.05	$ 122.62	$ 125.24	$ 127.92	$ 130.66
ANT-060	Principal Computer Systems Analyst	$ 142.03	$ 145.07	$ 148.17	$ 151.34	$ 154.58	$ 157.89
ANT-061	Legacy Systems Analyst	$ 116.50	$ 118.99	$ 121.54	$ 124.14	$ 126.80	$ 129.51
ANT-062	Jr. Functional Analyst/Specialist	$ 65.31	$ 66.71	$ 68.14	$ 69.59	$ 71.08	$ 72.60
ANT-063	Functional Analyst/Specialist	$ 77.25	$ 78.90	$ 80.59	$ 82.32	$ 84.08	$ 85.88
ANT-064	Sr. Functional Analyst/Specialist	$ 99.37	$ 101.49	$ 103.67	$ 105.88	$ 108.15	$ 110.46
ANT-065	Principal Functional Analyst/Specialist	$ 104.26	$ 106.49	$ 108.77	$ 111.10	$ 113.48	$ 115.91
ANT-066	Sr. Principal Functional Analyst/Specialist	$ 145.05	$ 148.16	$ 151.33	$ 154.56	$ 157.87	$ 161.25
ANT-067	Data Management Specialist	$ 115.85	$ 118.33	$ 120.86	$ 123.45	$ 126.09	$ 128.79
ANT-068	Data Administrator	$ 111.30	$ 113.68	$ 116.11	$ 118.59	$ 121.13	$ 123.72
ANT-069	Data Manager	$ 142.96	$ 146.02	$ 149.15	$ 152.34	$ 155.60	$ 158.93
ANT-070	Computer Operations Manager	$ 86.31	$ 88.16	$ 90.04	$ 91.97	$ 93.94	$ 95.95
ANT-071	Sr. Computer Operations Manager	$ 126.69	$ 129.40	$ 132.17	$ 135.00	$ 137.89	$ 140.84
ANT-076	Communications Engineer	$ 115.67	$ 118.15	$ 120.68	$ 123.26	$ 125.90	$ 128.59
ANT-077	Sr. Communications Engineer	$ 132.50	$ 135.34	$ 138.24	$ 141.19	$ 144.22	$ 147.30
ANT-078	Jr. Network Engineer	$ 77.78	$ 79.45	$ 81.15	$ 82.88	$ 84.66	$ 86.47
ANT-079	Network Engineer	$ 87.04	$ 88.90	$ 90.80	$ 92.75	$ 94.73	$ 96.76
ANT-080	Staff Network Engineer	$ 108.03	$ 110.34	$ 112.70	$ 115.11	$ 117.57	$ 120.09
ANT-081	Sr. Network Engineer	$ 117.59	$ 120.11	$ 122.68	$ 125.30	$ 127.98	$ 130.72
ANT-082	Principal Network Engineer	$ 159.19	$ 162.59	$ 166.07	$ 169.63	$ 173.26	$ 176.97
ANT-083	Network Administrator	$ 100.43	$ 102.58	$ 104.78	$ 107.02	$ 109.31	$ 111.65
ANT-084	Sr. Network Administrator	$ 124.59	$ 127.26	$ 129.98	$ 132.76	$ 135.60	$ 138.51
ANT-088	Network/Computer Support Specialist	$ 82.05	$ 83.80	$ 85.60	$ 87.43	$ 89.30	$ 91.21
ANT-089	Computer System/Network Integ Engin	$ 89.15	$ 91.05	$ 93.00	$ 94.99	$ 97.02	$ 99.10
ANT-092	Sr. Telecommunications Analyst	$ 83.05	$ 84.83	$ 86.64	$ 88.50	$ 90.39	$ 92.33
ANT-093	Communications Network Manager	$ 104.56	$ 106.80	$ 109.08	$ 111.42	$ 113.80	$ 116.24
ANT-102	Hardware Specialist	$ 88.90	$ 90.80	$ 92.75	$ 94.73	$ 96.76	$ 98.83
ANT-103	Quality Assurance/IV&V Analyst	$ 79.61	$ 81.31	$ 83.05	$ 84.83	$ 86.64	$ 88.50
ANT-104	Quality Assurance/IV&V Specialist	$ 82.40	$ 84.16	$ 85.96	$ 87.80	$ 89.68	$ 91.60
ANT-105	Quality Assurance IV&V Manager	$ 133.59	$ 136.45	$ 139.37	$ 142.35	$ 145.39	$ 148.51

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ANT-108	Configuration Management Specialist	$ 99.39	$ 101.52	$ 103.69	$ 105.91	$ 108.17	$ 110.49
ANT-109	Sr. Configuration Mgt. Specialist	$ 120.25	$ 122.82	$ 125.45	$ 128.13	$ 130.88	$ 133.68
ANT-111	Training Specialist/Instructor	$ 74.91	$ 76.52	$ 78.15	$ 79.83	$ 81.54	$ 83.28
ANT-112	Sr. Training Specialist/Instructor	$ 99.23	$ 101.35	$ 103.52	$ 105.74	$ 108.00	$ 110.31
ANT-114	Training Specialist	$ 74.91	$ 76.52	$ 78.15	$ 79.83	$ 81.54	$ 83.28
ANT-115	Sr. Training Specialist	$ 99.12	$ 101.25	$ 103.41	$ 105.63	$ 107.89	$ 110.19
ANT-116	Principal Training Specialist	$ 119.57	$ 122.13	$ 124.75	$ 127.42	$ 130.14	$ 132.93
ANT-119	Testing and Validation Specialist	$ 68.29	$ 69.75	$ 71.25	$ 72.77	$ 74.33	$ 75.92
ANT-121	Principal Testing and Validation Specialist	$ 108.12	$ 110.44	$ 112.80	$ 115.21	$ 117.68	$ 120.20
ANT-123	Instructional System Designer	$ 85.85	$ 87.69	$ 89.57	$ 91.48	$ 93.44	$ 95.44
ANT-124	Sr. Instructional System Designer	$ 102.18	$ 104.37	$ 106.60	$ 108.88	$ 111.21	$ 113.59
ANT-128	Staff Graphic Design Specialist	$ 77.56	$ 79.22	$ 80.91	$ 82.64	$ 84.41	$ 86.22
ANT-129	Sr. Graphic Design Specialist	$ 89.44	$ 91.35	$ 93.31	$ 95.30	$ 97.34	$ 99.43
ANT-130	Principal Graphic Design Specialist	$ 108.12	$ 110.44	$ 112.80	$ 115.21	$ 117.68	$ 120.20
ANT-133	Contract Administrator	$ 77.94	$ 79.61	$ 81.32	$ 83.06	$ 84.83	$ 86.65
ANT-134	Sr. Contracts Administrator	$ 104.56	$ 106.80	$ 109.08	$ 111.42	$ 113.80	$ 116.24
ANT-137	Program Management Specialist	$ 75.63	$ 77.25	$ 78.90	$ 80.59	$ 82.32	$ 84.08
ANT-138	Sr. Program Management Specialist	$ 99.69	$ 101.83	$ 104.01	$ 106.23	$ 108.51	$ 110.83
ANT-139	Principal Program Management Specialist	$ 114.91	$ 117.37	$ 119.88	$ 122.45	$ 125.07	$ 127.75
ANT-148	Sr. Documentation Specialist	$ 93.57	$ 95.57	$ 97.61	$ 99.70	$ 101.84	$ 104.02
ANT-150	Technical Editor	$ 98.00	$ 100.10	$ 102.24	$ 104.43	$ 106.66	$ 108.94
ANT-158	Imagery Analyst	$ 108.96	$ 111.30	$ 113.68	$ 116.11	$ 118.59	$ 121.13
ANT-159	Imagery Sr Analyst	$ 125.30	$ 127.98	$ 130.72	$ 133.52	$ 136.37	$ 139.29
ANT-160	Imagery Principal Analyst	$ 144.54	$ 147.63	$ 150.79	$ 154.02	$ 157.31	$ 160.68
ANT-161	Imagery Sr Princ Analyst	$ 191.18	$ 195.27	$ 199.45	$ 203.72	$ 208.08	$ 212.53
ANT-162	Geospatial Analyst	$ 115.75	$ 118.23	$ 120.76	$ 123.34	$ 125.98	$ 128.68
ANT-163	Geospatial Sr Analyst	$ 133.10	$ 135.95	$ 138.86	$ 141.83	$ 144.87	$ 147.97
ANT-164	Geospatial Principal Analyst	$ 149.13	$ 152.32	$ 155.58	$ 158.91	$ 162.31	$ 165.79
ANT-165	Geospatial Sr Princ Analyst	$ 191.18	$ 195.27	$ 199.45	$ 203.72	$ 208.08	$ 212.53

Rates are escalated 2.14% annually

OCONUS Labor: GDIT's rates are for CONUS efforts only. For OCONUS efforts GDIT will increase the labor rates by the applicable U.S. State Department published differentials. Other related international expenses required to support employees outside of the continental United States may be charged as ODCs (including but not limited to, special space costs, taxes, Defense Base Act (DBA) Workers' Compensation insurance, travel accident insurance, and possible telecommunications costs) in our task order proposals.

Overtime: Should overtime be required and authorized, GDIT will invoice the Government at one and one-half Times the task order negotiated labor rates for categories determined to be covered by the SCA (identified ** above).

ELECTRONIC COMMERCE AND SUBSCRIPTION SERVICES

SIN 54151ECOM – Electronic Commerce Services Descriptions

General Dynamics Information Technology (General Dynamics IT) provides a broad range of Cloud Computing Services to support Electronic Commerce and other computing requirements. Our Cloud Computing Services span Infrastructure as a Service (IaaS) and Software as a Service (SaaS) and include general purpose Virtual Machine (VM), Email, Office Automation, Electronic Records Management, and Email Migration services. General Dynamics IT provisions our systems for compliance with Federal security requirements. Our solutions are robust, highly scalable, and secure.

Infrastructure as a Service (IaaS) - Virtual Machine Services

The VM services can be acquired as a single VM or as many VM's working together in support of major application hosting server environments. Our VM services can be acquired in several Operating System platforms including Windows, Linux, or Solaris and in 64-bit or 32-bit configurations. The VM services can be acquired in a range of pre-established configuration bundles of memory and hard disk storage. Additional client-specific configurations can also be supported (please contact the listed General Dynamics IT staff for more information).

Our state of the art data centers and service are located and provided within the Continental United States. Through our E3 portal, users may order VMs, reports, or submit trouble tickets. We provision our systems for compliance with Federal security requirements. Our solution is robust, highly scalable, and secure.

Our Cloud Computing technical solution allows customers to mix traditional dedicated IT assets with cloud computing resources. This feature allows Federal IT solutions to take advantage of capacity on demand to permit cloud bursting.

Our Federally Compliant Application Platform (FCAP) is an IT infrastructure built from the ground up to be 100% compliant with a superset of federal mandates. Government agency applications deploying on the FCAP platform inherit the compliance-based disciplines and uniform delivery postures that enable us to guarantee 100% C&A up to the application layer.

We provide an Integrated Portal for timely user support and information. Our portal is unique to industry providing a single interface for all users. Within this single user interface, we provide secure access that provides management screens, monitoring, environment configuration, self help and integration into the help desk and trouble ticket creation. This single interface allows all users to access the information important to them from one location without the need to cross reference multiple sources. In addition our portal also provides a virtual console for each running virtual machine for operating systems level administration and user access.

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

General Dynamics Information Technology, Inc. (GDIT) is offering a fully functional, reliable, secure, feature-rich cloud Email capability built on industry leading Email products and a highly reliable and proven infrastructure. GDIT's Email offering includes support for mobile devices, and archiving and eDiscovery functions. The GDIT solution ensures greater than 99.9% service availability, as measured over a rolling 1-month (720-hour) period, through operationally redundant design practices applied across geographically diverse datacenter locations. Our Email offering provides full function access to all email, collaboration, and administration functions through web browsers. Full support is provided for mainstream browsers including:

Internet Explorer 7 or later, Mozilla Firefox 3 or later, Safari 3, or later and current releases of Chrome. In addition, non-AJAX, standard HTML mode is provided for non-mainstream browsers or older browsers lacking modern extensions, along with a mobile web client for devices with small displays. 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 and can support any size within the limits of modern storage and file system technology.

GDIT offers Email services in the following cloud environments:

- Government Community – a cloud specifically limited to Government clients with an appropriate Government issued domain name for Moderate Impact systems. Each client's data and cloud resources are logically separated using VLANs, network ACLs, and distributed firewall rules.
- Provider Furnished Equipment Private Cloud – a private cloud with resources dedicated to the client for Moderate Impact systems. All computing resources are provided by GDIT. Each client's data and cloud resources are physically and electronically separated.
- Secret Enclave – a private cloud with resources dedicated to the client for High Impact systems. All computing resources are provided by GDIT. Each client's data and cloud resources are physically and electronically separated (i.e., the secret enclave SCIF is assumed to be dedicated to an individual ordering agency and will not be shared with other agencies). The secret enclave solution and associated pricing assume a dedicated staff for O&M and Tier 3 support. The secret enclave assumes the ordering agency will provide its preferred secure channel for connectivity (e.g., SIPRNet).
- Public Cloud - a cloud with an appropriate Government issued domain name for Moderate Impact systems. Cloud can be used by Government and non-Government clients. Each client's data and cloud resources are logically separated using VLANs, network ACLs, and distributed firewall rules.

GDIT has implemented a highly secure cloud Email environment - only trusted and securely authenticated Government administrators are allowed to access the hosted infrastructure. We have implemented numerous dual-factor authentication mechanisms for remote Government administrators. We have implemented controlled access by RSA multi-factor authentication. GDIT uses strong encryption to protect the session content of all administration and remote access functions. A FIPS-compliant SSL VPN supports all remote functions. In addition, the ability to support two-factor authentication and CAC will be available in an upcoming release of the Zimbra product which is scheduled for release for April 2012. The GDIT 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.

The GDIT cloud Email offering provides a comprehensive mail list (a.k.a., mail alias, reflector) capability. As we add and remove mail accounts from the system, a global mail list will update containing all active accounts on the system. Government Administrators and other designated agency officials will be provided access to send email to this mail list allowing them to send emails to all accounts. The GDIT solution allows designated users the ability to create group mailboxes and delegate the management ability of the mailbox to specified end-users. The end-users may then manage the permissions of the group mailbox.

The GDIT cloud Email solution provides a broad range of calendar and contact management features including the following: create, edit and delete personal contacts and information for the contacts; group or tag a collection of contacts; send emails to a collection of contacts; create, edit and delete personal appointments and meeting requests; send calendar requests to other end-users; create and edit shared calendars for use in resource schedule (i.e., conference rooms); designate owners and schedulers for shared calendars; and many others. The GDIT solution provides the ability to delegate calendar management functions.

The GDIT solution provides each account with instant messaging capabilities, enabled/disabled by administrative control. Our solution provides a rich API and associated documentation to allow developers and third-party applications to integrate with all data and functionality available within the email environment including mailboxes, calendar, contacts, and briefcase data. The API can be leveraged by agency development staff to integrate their applications with email and allow other products such as achieving, E-

Discovery and electronic records Management applications. All API documentation will be published online for easy access.

The GDIT Email offering provides the ability for users to encrypt and sign email messages to comply with FIPS 1402 and meet the most stringent privacy requirements including PCI, HIPAA, etc. Our cloud Email offering leverages an industry leading email protection solution to defend against any inbound or outbound threats. Our solution provides a mail security layer that includes specialized appliances at the edge and transport layer screening to evaluate message payloads and their attachments to remove spam, phishing, and malware content. All threat filtering is performed real-time and in-line to provide scanning of all inbound and outbound messages. Our cloud Email solution leverages the industry leading email protection solution and the flexibility to incorporate agency specific rules for monitoring and filtering of email traffic and attachments. Each rule can be specified for the individual domain allowing each agency or agency component to incorporate specific filtering rules.

GDIT provides comprehensive support to our Email offering. Our trouble ticketing system is a suite of integrated applications designed to support IT service automation, resource management and shared services. The ticketing system is built on modern Web 2.0 technologies. The ticketing system provides a common operating picture to the IT enterprise for enhanced situational awareness and rapid incident resolution. Government Administrators will be provided access to the ticketing system interface and be provided access to view their agency related tickets and any report. GDIT provides a 24x7x365 “agile customer service” solution that provides a single point of contact for help desk and technical support services continuously, across all operating conditions, and reachable through phone (800-number), web portal ticketing, and email.

GDIT provides a variety of additional offerings in support of our cloud Email including additional email storage, email archiving, and Blackberry support. Clients can procure additional storage for each mailbox in 1 GB increments. Clients can procure and control automated archiving functions to establish the rules and frequency for archiving their email. We also offer email integration and support for client-provided Blackberries. The GDIT solution provides a mobile web client for devices with small displays, along with policy management features allowing administrators to establish rules for enabling synchronization and managing security policies for mobile devices within the Cloud Email as a Service environment. For Blackberry devices, we provide integration with BES that enables over-the-air synchronization of mail, address books (including GAL), calendars, and tasks in the native BlackBerry user interface.

GDIT is offering Records Management and Office Automation Software as a Service to complement the Email services. For Electronic Records Management, we have incorporated the HP TRIM software, a proven records management system that provides a scalable, policy driven foundation. Email is one of many record types managed by HP TRIM. Electronic records and physical records are managed in one system and in the same way regardless of record type, format or source. It enables groups of individual documents and records to be combined into a folder record and applies rules to maintain authenticity, reliability, integrity and usability to the folder record and individual documents and records. HP TRIM has been certified against the rigorous U.S. DoD 5015.2 v3 requirement by achieving certification for all chapters including Chapter 2 (baseline records management), Chapter 3 (classified records management), and Chapter 4 (FOI & Privacy records management). It provides for the maintenance of authenticity through a unified audit trail and allows documents to be captured from the applications involved in the business process that is described by the combined record, thereby providing the reliability of the combined folder record. It allows for the maintenance of integrity for folder records and the documents making up the record for the whole lifespan of the record. The internal audit trail is stored securely in the database and can be queried using a simple search tool that allows selection of events by date, record, and user. In addition to all software and hardware, our records management solution includes 5 GB of storage per user that can be aggregated across the domain.

We have included ThinkFree to provide our Office Automation services capabilities including support for Word Processing Documents, Spreadsheets, Presentations, Create user content, Serve as a document repository and track document history, Create wiki pages, and other functions. ThinkFree Server combines a set of web office applications and integrates with our Email Zimbra Collaboration Suite. Our solution

provides office automation tools to be able to create, store and share content across users. The Zimbra briefcase feature provides for document storing, hosting, and versioning. In addition, it supports the hosting of web content such a wiki pages. Documents and web pages can be provided with various levels of access ranging from full access to a set of users to read-only access to all users within a the given domain. Our office automation solution includes 5 GB of storage per user that can be aggregated across the domain.

GDIT offers comprehensive Email migration services for the message stores/folders, calendar, and contacts. We offer migration support for Microsoft Exchange, Lotus Notes, GroupWise, Oracle/SUN JES, Zimbra, IMAP compatible mail servers, and others. Our Cloud Email solution can be integrated with the ordering activity's LDAP system in multiple contexts over a secure VPN. Our solution provides SAML 2.0 interface to facilitate integration and synchronization with the ordering activity's LDAP provider through a Java-based mechanism, which provides an RFC compliant result to access Cloud Email resources. Our phased migration approach provides support for parallel operation of clients' existing email systems and the target Cloud Email as Service environments during transition. The underlying technology behind our Email as a Service solution provides email routing capabilities that facilitate coexistence with the current email infrastructure, as either the authoritative (sending) or receiving mail domain. GDIT performs Email migrations in accordance with the following assumptions:

1. Each migration effort will consist of four phases: Kickoff, Assessment & Design, Configuration, and Data Move. The first three are precursor phases and involve working with the ordering agency to develop the plan and set up the to-be environment while meeting the agency's specific requirements. The fourth phase, Data Move, will be conducted iteratively until all user data and users are on the new system.
2. During the Data Move phase, we assume that a total of 2,500 users per month can be migrated, assuming an average mailbox size of 300Mb and minimum transfer rate of 4 GB per hour.
3. Migration pricing assumes that data migrations will only occur on weekends. If the agency allows for night and other maintenance time windows, then more than 2,500 users can be migrated per month.
4. If ordering agencies can support greater than 4Gb/hr transfer, have average mailbox sizes less than 300Mb, and provide larger migration windows (not just weekends), then the number of mailbox migrations completed per month can be higher.
5. During the migration window, no changes should be made to the current agency email system or any dependent systems that may alter requirements or impact the migration of user data.
6. Migration effort includes a dedicated Project Manager, Technical Lead, and Change Management Lead for the duration of the migration. Additional support and SME will be brought in through the migration period as needed to include engineers, trainers, additional help desk support, etc.
7. If there is a requirement for a dedicated Government-specific circuit, the ordering agency will provide its preferred secure channel for connectivity (e.g.,OneNet for DHS).
8. Onsite migration support assumes a full day of support for a minimum of one user (one-on-one) and will provide additional one-on-one sessions for as many users as possible during the 8-hour day.

SIN 54151ECOM – Infrastructure as a Service Offering – Cloud Computing Services Pricing

MFR PART NO	PRODUCT NAME	PRODUCT DESCRIPTION	GSA PRICE
GD32-1-W OS	IaaS	**Virtual Machine Bundle Windows OS-- Persistent Storage**: 32 Bit -1 GB RAM, 40 GB HDD Bundle or equivalent	$0.43
GD32-2-W	IaaS	**Virtual Machine Bundle Windows OS-- Persistent Storage**: 32 Bit -2 GB RAM, 80 GB HDD Bundle or equivalent	$0.70
GD32-4-W	IaaS	**Virtual Machine Bundle Windows OS -- Persistent Storage**: 32 Bit -4 GB RAM, 160 GB HDD Bundle or equivalent	$1.00
GD32-8-W	IaaS	**Virtual Machine Bundle Windows OS-- Persistent Storage**: 32 Bit -8 GB RAM, 320 GB HDD Bundle or equivalent	$1.24
GD32-15-W	IaaS	**Virtual Machine Bundle Windows OS-- Persistent Storage**: 32 Bit -15.5 GB RAM, 620 GB HDD Bundle or equivalent	$2.28
GD64-1-W	IaaS	**Virtual Machine Bundle Windows OS-- Persistent Storage**: 64 Bit -1 GB RAM, 40 GB HDD Bundle or equivalent	$0.43
GD64-2-W	IaaS	**Virtual Machine Bundle Windows OS-- Persistent Storage**: 64 Bit -2 GB RAM, 80 GB HDD Bundle or equivalent	$0.70
GD64-4-W	IaaS	**Virtual Machine Bundle Windows OS-- Persistent Storage**: 64 Bit -4 GB RAM, 160 GB HDD Bundle or equivalent	$1.00
GD64-8-W	IaaS	**Virtual Machine Bundle Windows OS-- Persistent Storage**: 64 Bit -8 GB RAM, 320 GB HDD Bundle or equivalent	$1.24
GD64-15-W	IaaS	**Virtual Machine Bundle Windows OS-- Persistent Storage**: 64 Bit -15.5 GB RAM, 620 GB HDD Bundle or equivalent	$2.28
GD32-1-L OS	IaaS	**Virtual Machine Bundle Linux OS--Persistent Storage**: 32 Bit -1 GB RAM, 40 GB HDD Bundle or equivalent	$0.27
GD32-2-O	IaaS	**Virtual Machine Bundle Linux OS--Persistent Storage**: 32 Bit -2 GB RAM, 80 GB HDD Bundle or equivalent	$0.44
GD32-4-O	IaaS	**Virtual Machine Bundle Linux OS--Persistent Storage**: 32 Bit -4 GB RAM, 160 GB HDD Bundle or equivalent	$0.61
GD32-8-O	IaaS	**Virtual Machine Bundle Linux OS--Persistent Storage**: 32 Bit -8 GB RAM, 320 GB HDD Bundle or equivalent	$0.78
GD32-15-O	IaaS	**Virtual Machine Bundle, Linux OS--Persistent Storage**: 32 Bit -15.5 GB RAM, 620 GB HDD Bundle or equivalent	$1.45
GD64-1-O	IaaS	**Virtual Machine Bundle Linux OS--Persistent Storage**: 64 Bit -1 GB RAM, 40 GB HDD Bundle or equivalent	$0.27
GD64-2-O	IaaS	**Virtual Machine Bundle Linux OS--Persistent Storage**: 64 Bit -2 GB RAM, 80 GB HDD Bundle or equivalent	$0.44
GD64-4-O	IaaS	**Virtual Machine Bundle Linux OS--Persistent Storage**: 64 Bit -4 GB RAM, 160 GB HDD Bundle or equivalent	$0.61
GD64-8-O	IaaS	**Virtual Machine Bundle Linux OS--Persistent Storage**: 64 Bit -8 GB RAM, 320 GB HDD Bundle or equivalent	$0.78
GD64-15-O	IaaS	**Virtual Machine Bundle Linux OS--Persistent Storage**: 64 Bit -15.5 GB RAM, 620 GB HDD Bundle or equivalent	$1.45
GD32-1-S OS	IaaS	**Virtual Machine Bundle Solaris OS -- Persistent Storage**: 32 Bit -1 GB RAM, 40 GB HDD Bundle or equivalent	$0.22

GD32-2-S	IaaS	**Virtual Machine Bundle Solaris OS -- Persistent Storage**: 32 Bit -2 GB RAM, 80 GB HDD Bundle or equivalent	$0.39
GD32-4-S	IaaS	**Virtual Machine Bundle Solaris OS -- Persistent Storage**: 32 Bit -4 GB RAM, 160 GB HDD Bundle or equivalent	$0.56
GD32-8-S	IaaS	**Virtual Machine Bundle Solaris OS -- Persistent Storage**: 32 Bit -8 GB RAM, 320 GB HDD Bundle or equivalent	$0.73
GD32-15-S	IaaS	**Virtual Machine Bundle Solaris OS -- Persistent Storage**: 32 Bit -15.5 GB RAM, 620 GB HDD Bundle or equivalent	$1.41
GD64-1-S	IaaS	**Virtual Machine Bundle Solaris OS -- Persistent Storage**: 64 Bit -1 GB RAM, 40 GB HDD Bundle or equivalent	$0.22
GD64-2-S	IaaS	**Virtual Machine Bundle Solaris OS -- Persistent Storage**: 64 Bit -2 GB RAM, 80 GB HDD Bundle or equivalent	$0.39
GD64-4-S	IaaS	**Virtual Machine Bundle Solaris OS -- Persistent Storage**: 64 Bit -4 GB RAM, 160 GB HDD Bundle or equivalent	$0.56
GD64-8-S	IaaS	**Virtual Machine Bundle Solaris OS -- Persistent Storage**: 64 Bit -8 GB RAM, 320 GB HDD Bundle or equivalent	$0.73
GD64-15-S	IaaS	**Virtual Machine Bundle Solaris OS -- Persistent Storage**: 64 Bit -15.5 GB RAM, 620 GB HDD Bundle or equivalent	$1.41
GD-EM-1	**Email-as-a-Service in Government Community Cloud**	Mailbox Tier 1 (<10K Mbox)	$5.60
GD-EM-2	**Email-as-a-Service in Government Community Cloud**	Mailbox Tier 2 (10K-50K Mbox)	$5.43
GD-EM-3	**Email-as-a-Service in Government Community Cloud**	Mailbox Tier 3 (>50K Mbox)	$4.94
GD-EM-4	**Email-as-a-Service in Government Community Cloud**	Additional GB Mailbox Tier 1 (<10K Mbox)	$0.35
GD-EM-5	**Email-as-a-Service in Government Community Cloud**	Additional GB Mailbox Tier 2 (10K-50K Mbox)	$0.16
GD-EM-6	**Email-as-a-Service in Government Community Cloud**	Additional GB Mailbox Tier 3 (>50K Mbox)	$0.14
GD-EM-7	**Email-as-a-Service in Government Community Cloud**	Archiving per Mailbox/Year Tier 1 (<10K Mbox)	$13.66
GD-EM-7A	**Email-as-a-Service in Government Community Cloud**	Additional GB of Archiving Storage Tier 1 (<10K Mbox)	$0.35
GD-EM-8	**Email-as-a-Service in Government Community Cloud**	Archiving per Mailbox/Year Tier 2 (10K-50K Mbox)	$5.97
GD-EM-8A	**Email-as-a-Service in Government Community Cloud**	Additional GB of Archiving Storage Tier 2 (10K-50K Mbox)	$0.16

GD-EM-9	**Email-as-a-Service in Government Community Cloud**	Archiving per Mailbox/Year Tier 3 (>50K Mbox)	$4.91
GD-EM-9A	**Email-as-a-Service in Government Community Cloud**	Additional GB of Archiving Storage Tier 3 (>50K Mbox)	$0.14
GD-EM-10	**Email-as-a-Service in Government Community Cloud**	Blackberry Enterprise Server per Mailbox/Year Tier 1 (,10K Mbox)	$4.93
GD-EM-11	**Email-as-a-Service in Government Community Cloud**	Blackberry Enterprise Server per Mailbox/Year Tier 2 (10K-50K Mbox)	$4.93
GD-EM-12	**Email-as-a-Service in Government Community Cloud**	Blackberry Enterprise Server per Mailbox/Year Tier 3 (>50K Mbox)	$4.93
GD-EM-13	**Email-as-a-Service using Provider Furnished Equipment in a Private Cloud**	Mailbox Tier 1 (<10K Mbox)	$22.57
GD-EM-14	**Email-as-a-Service using Provider Furnished Equipment in a Private Cloud**	Mailbox Tier 2 (10K-50K Mbox)	$12.43
GD-EM-15	**Email-as-a-Service using Provider Furnished Equipment in a Private Cloud**	Mailbox Tier 3 (>50K Mbox)	$6.96
GD-EM-16	**Email-as-a-Service using Provider Furnished Equipment in a Private Cloud**	Additional GB Mailbox Tier 1 (<10K Mbox)	$0.35
GD-EM-17	**Email-as-a-Service using Provider Furnished Equipment in a Private Cloud**	Additional GB Mailbox Tier 2 (10K-50K Mbox)	$0.16
GD-EM-18	**Email-as-a-Service using Provider Furnished Equipment in a Private Cloud**	Additional GB Mailbox Tier 3 (>50K Mbox)	$0.14
GD-EM-19	**Email-as-a-Service using Provider Furnished Equipment in a Private Cloud**	Archiving per Mailbox/Year Tier 1 (<10K Mbox)	$13.66
GD-EM-19A	**Email-as-a-Service using Provider Furnished Equipment in a Private Cloud**	Additional GB of Archiving Storage Tier 1 (<10K Mbox)	$0.35
GD-EM-20	**Email-as-a-Service using Provider Furnished Equipment in a Private Cloud**	Archiving per Mailbox/Year Tier 2 (10K-50K Mbox)	$5.97
GD-EM-20A	**Email-as-a-Service using Provider Furnished Equipment in a Private Cloud**	Additional GB of Archiving Storage Tier 2 (10K-50K Mbox)	$0.16
GD-EM-21	**Email-as-a-Service using Provider Furnished Equipment in a Private Cloud**	Archiving per Mailbox/Year Tier 3 (>50K Mbox)	$4.91
GD-EM-21A	**Email-as-a-Service using Provider Furnished Equipment in a Private Cloud**	Additional GB of Archiving Storage Tier 3 (>50K Mbox)	$0.14

GD-EM-22	**Email-as-a-Service using Provider Furnished Equipment in a Private Cloud**	Blackberry Enterprise Server per Mailbox/Year Tier 1 (<10K Mbox)	$4.93
GD-EM-23	**Email-as-a-Service using Provider Furnished Equipment in a Private Cloud**	Blackberry Enterprise Server per Mailbox/Year Tier 2 (10K-50K Mbox)	$4.93
GD-EM-24	**Email-as-a-Service using Provider Furnished Equipment in a Private Cloud**	Blackberry Enterprise Server per Mailbox/Year Tier 3 (>50K Mbox)	$4.93
GD-EM-25	**Email-as-a-Service in a Secret Enclave Private Cloud**	Mailbox Tier 1 (<10K Mbox)	$34.97
GD-EM-26	**Email-as-a-Service in a Secret Enclave Private Cloud**	Mailbox Tier 2 (10K-50K Mbox)	$15.49
GD-EM-27	**Email-as-a-Service in a Secret Enclave Private Cloud**	Mailbox Tier 3 (>50K Mbox)	$8.53
GD-EM-28	**Email-as-a-Service in a Secret Enclave Private Cloud**	Additional GB Mailbox Tier 1 (<10K Mbox)	$0.35
GD-EM-29	**Email-as-a-Service in a Secret Enclave Private Cloud**	Additional GB Mailbox Tier 2 (10K-50K Mbox)	$0.16
GD-EM-30	**Email-as-a-Service in a Secret Enclave Private Cloud**	Additional GB Mailbox Tier 3 (>50K Mbox)	$0.14
GD-EM-31	**Email-as-a-Service in a Secret Enclave Private Cloud**	Archiving per Mailbox/Year Tier 1 (<10K Mbox)	$13.66
GD-EM-31A	**Email-as-a-Service in a Secret Enclave Private Cloud**	Additional GB of Archiving Storage Tier 1 (<10K Mbox)	$0.35
GD-EM-32	**Email-as-a-Service in a Secret Enclave Private Cloud**	Archiving per Mailbox/Year Tier 2 (10K-50K Mbox)	$5.97
GD-EM-32A	**Email-as-a-Service in a Secret Enclave Private Cloud**	Additional GB of Archiving Storage Tier 2 (10K-50K Mbox)	$0.16
GD-EM-33	**Email-as-a-Service in a Secret Enclave Private Cloud**	Archiving per Mailbox/Year Tier 3 (>50K Mbox)	$4.91
GD-EM-33A	**Email-as-a-Service in a Secret Enclave Private Cloud**	Additional GB of Archiving Storage Tier 3 (>50K Mbox)	$0.14
GD-EM-34	**Email-as-a-Service in a Secret Enclave Private Cloud**	Blackberry Enterprise Server per Mailbox/Year Tier 1 (<10K Mbox)	$4.93
GD-EM-35	**Email-as-a-Service in a Secret Enclave Private Cloud**	Blackberry Enterprise Server per Mailbox/Year Tier 2 (10K-50K Mbox)	$4.93
GD-EM-36	**Email-as-a-Service in a Secret Enclave Private Cloud**	Blackberry Enterprise Server per Mailbox/Year Tier 3 (>50K Mbox)	$4.93
GD-EM-37	**Email-as-a-Service in a Public Cloud**	Mailbox Tier 1 (<10K Mbox)	$5.60
GD-EM-38	**Email-as-a-Service in a Public Cloud**	Mailbox Tier 2 (10K-50K Mbox)	$5.43
GD-EM-39	**Email-as-a-Service in a Public Cloud**	Mailbox Tier 3 (>50K Mbox)	$4.94
GD-EM-40	**Email-as-a-Service in a Public Cloud**	Additional GB Mailbox Tier 1 (<10K Mbox)	$0.35
GD-EM-41	**Email-as-a-Service in a Public Cloud**	Additional GB Mailbox Tier 2 (10K-50K Mbox)	$0.16
GD-EM-42	**Email-as-a-Service in a Public Cloud**	Additional GB Mailbox Tier 3 (>50K Mbox)	$0.14

GD-EM-43	**Email-as-a-Service in a Public Cloud**	Archiving per Mailbox/Year Tier 1 (<10K Mbox)	$13.66
GD-EM-43A	**Email-as-a-Service in a Public Cloud**	Additional GB of Archiving Storage Tier 1 (<10K Mbox)	$0.35
GD-EM-44	**Email-as-a-Service in a Public Cloud**	Archiving per Mailbox/Year Tier 2 (10K-50K Mbox)	$5.97
GD-EM-44A	**Email-as-a-Service in a Public Cloud**	Additional GB of Archiving Storage Tier 2 (10K-50K Mbox)	$0.16
GD-EM-45	**Email-as-a-Service in a Public Cloud**	Archiving per Mailbox/Year Tier 3 (>50K Mbox)	$4.91
GD-EM-45A	**Email-as-a-Service in a Public Cloud**	Additional GB of Archiving Storage Tier 3 (>50K Mbox)	$0.14
GD-EM-46	**Email-as-a-Service in a Public Cloud**	Blackberry Enterprise Server per Mailbox/Year Tier 1 (<10K Mbox)	$4.93
GD-EM-47	**Email-as-a-Service in a Public Cloud**	Blackberry Enterprise Server per Mailbox/Year Tier 2 (10K-50K Mbox)	$4.93
GD-EM-48	**Email-as-a-Service in a Public Cloud**	Blackberry Enterprise Server per Mailbox/Year Tier 3 (>50K Mbox)	$4.93
GD-EM-49	**Office Automation in a Government Community Cloud, Public Cloud, Secret Enclave Private Cloud or using Provider Furnished Equipment in a Private Cloud**	Office Automation SaaS Tier 1 (<10K Users	$6.14
GD-EM-49A	**Office Automation in a Government Community Cloud, Public Cloud, Secret Enclave Private Cloud or using Provider Furnished Equipment in a Private Cloud**	Additional GB of Office Automation Storage Tier 1 (<10K Users)	$0.35
GD-EM-50	**Office Automation in a Government Community Cloud, Public Cloud, Secret Enclave Private Cloud or using Provider Furnished Equipment in a Private Cloud**	Office Automation SaaS Tier 2 (10K-50K Users)	$3.52
GD-EM-50A	**Office Automation in a Government Community Cloud, Public Cloud, Secret Enclave Private Cloud or using Provider Furnished Equipment in a Private Cloud**	Additional GB of Office Automation Storage Tier 2 (10K-50K Users)	$0.16
GD-EM-51	**Office Automation in a Government Community Cloud, Public Cloud, Secret Enclave Private Cloud or using Provider Furnished Equipment in a Private Cloud**	Office Automation SaaS Tier 3 (>50K Users)	$3.52
GD-EM-51A	**Office Automation in a Government Community Cloud, Public Cloud, Secret Enclave Private Cloud**	Additional GB of Office Automation Storage Tier 3 (>50K Users)	$0.14

	or using Provider Furnished Equipment in a Private Cloud		
GD-EM-52	**Office Automation in a Government Community Cloud, Public Cloud, Secret Enclave Private Cloud or using Provider Furnished Equipment in a Private Cloud**	Records Management Tier 1 (<10K users)	$13.13
GD-EM-52A	**Office Automation in a Government Community Cloud, Public Cloud, Secret Enclave Private Cloud or using Provider Furnished Equipment in a Private Cloud**	Additional GB of Records Management Storage Tier 1 (<10K users)	$0.35
GD-EM-53	**Office Automation in a Government Community Cloud, Public Cloud, Secret Enclave Private Cloud or using Provider Furnished Equipment in a Private Cloud**	Records Management Tier 2 (10K-50K users)	$13.13
GD-EM-53A	**Office Automation in a Government Community Cloud, Public Cloud, Secret Enclave Private Cloud or using Provider Furnished Equipment in a Private Cloud**	Additional GB of Records Management Storage Tier 2 (10K-50K users)	$0.16
GD-EM-54	**Office Automation in a Government Community Cloud, Public Cloud, Secret Enclave Private Cloud or using Provider Furnished Equipment in a Private Cloud**	Records Management Tier 3 (>50K users)	$13.13
GD-EM-54A	**Office Automation in a Government Community Cloud, Public Cloud, Secret Enclave Private Cloud or using Provider Furnished Equipment in a Private Cloud**	Additional GB of Records Management Storage Tier 3 (>50K users)	$0.14
GD-EM-55	**Office Automation in a Government Community Cloud, Public Cloud, Secret Enclave Private Cloud or using Provider Furnished Equipment in a Private Cloud**	On-Premise Executive Migration Service Tier 1 (<10K users)	$1,033.11
GD-EM-56	**Office Automation in a Government**	On-Premise Executive Migration Service Tier 2 (10K-50K users)	$1,033.11

	Community Cloud, Public Cloud, Secret Enclave Private Cloud or using Provider Furnished Equipment in a Private Cloud		
GD-EM-57	**Office Automation in a Government Community Cloud, Public Cloud, Secret Enclave Private Cloud or using Provider Furnished Equipment in a Private Cloud**	On-Premise Executive Migration Service Tier 3 (>50K users)	$1,033.11
GD-EM-58	**Office Automation in a Government Community Cloud, Public Cloud, Secret Enclave Private Cloud or using Provider Furnished Equipment in a Private Cloud**	Remote/Standard Service Migration Service Tier 1 (<10K users)	$14,435.00
GD-EM-59	**Office Automation in a Government Community Cloud, Public Cloud, Secret Enclave Private Cloud or using Provider Furnished Equipment in a Private Cloud**	Remote/Standard Migration Service Tier 2 (10K-50K users)	$87.79
GD-EM-60	**Office Automation in a Government Community Cloud, Public Cloud, Secret Enclave Private Cloud or using Provider Furnished Equipment in a Private Cloud**	Remote/Standard Migration Service Tier 3 (>50K users)	$73.66

Special Item 54151ECOM – PS4 Service Pricing

MFR PART NO	PRODUCT NAME	PRODUCT DESCRIPTION	GSA Price
PS4-BU	PS4	PS4 Base Unit - One-time Charge	$15,798.00
PS4-1A-RP	PS4	Service 1a: PS4 Multi-Protocol Reverse Proxy - One-time Charge	$12,856.00
PS4-1B-FP	PS4	Service 1b: PS4 forward Proxy- One-time Charge	$11,727.00
PS4-2-NAS	PS4	Service 2: PS4 Multi-Protocol Network Attached Storage (NAS)- One-time Charge	$8,186.00
PS4-3-TCP	PS4	Service 3: PS4 TCP Optimization - One-time Charge	$12,551.00
PS4-4-ODAD	PS4	Service 4: PS4 On-Demand Ad-Hoc Networks - One-time Charge	$12,112.00
PS4-5-HAF	PS4	Service 5: PS4 High-Availability Firewall- One-time Charge	$8,374.00
PS4-6-GLB	PS4	Service 6: PS4 Global Load Balancing- One-time Charge	$8,214.00
PS4-7-OE	PS4	Service 7: PS4 Operating Environment- One-time Charge	$8,863.00
PS4-BU-RC	PS4	PS4 Base Unit- Recurring Charge	$8,952.00
PS4-1A-RP-RC	PS4	Service 1a: PS4 Multi-Protocol Reverse Proxy- Recurring Charge	$7,142.00
PS4-1B-FP-RC	PS4	Service 1b: PS4 forward Proxy- Recurring Charge	$6,997.00
PS4-2-NAS-RC	PS4	Service 2: PS4 Multi-Protocol Network Attached Storage (NAS)- Recurring Charge	$4,219.00
PS4-3-TCP-RC	PS4	Service 3: PS4 TCP Optimization- Recurring Charge	$4,378.00
PS4-4-ODAD-RC	PS4	Service 4: PS4 On-Demand Ad-Hoc Networks- Recurring Charge	$5,178.00
PS4-5-HAF-RC	PS4	Service 5: PS4 High-Availability Firewall-Recurring Charge	$1,706.00
PS4-6-GLB-RC	PS4	Service 6: PS4 Global Load Balancing- Recurring Charge	$3,765.00

PS4-7-OE-RC	PS4	Service 7: PS4 Operating Environment-Recurring Charge	$1,188.00

Notes:
- Discounts will be applied on requests above 24 nodes
- Each service requires a base unit
- Service contract is for a three-year period

Base Unit

The Base Unit of PS4 provides (among other things) the basic security tools required by network and enclave STIGs. The PS4 base further provides the basis of access control and secure remote management for all other PS4 services components. The firewall integration and the fact that all subcomponents are currently approved for use in DoD makes PS4 a fully accreditable system under DoD 8500 series DITSCAP and DIACAP processes.

Service 1A—PS4 Multi-Protocol Reverse Proxy
The PS4 Multi-Protocol Reverse Proxy service brings information closer to your users by proxying it with multiprotocol caching. The PS4 Multi-Protocol Reverse Proxy service enables better response times and uses less bandwidth than traditional proxy services, allowing you to use your valuable bandwidth for needs other than Web.

The PS4 Multi-Protocol Reverse Proxy service allows WAN separation at LAN speeds by moving traditional applications out of the LAN and into the WAN closer to your users, including:

- CIFS, HTTP, NFS, FTP
- Video files
- Presentations
- Large PDFs
- Local file storage
- Remote file backup

PS4 can be used to provide a reverse proxy solution for HTTP, LDAP, FTP, and other protocol SSL variations, hence the “multi-protocol” in the service name. This is meant to be used with an application that has a multi-protocol interface to its content such as GDS CRL staging. It is highly available and can be coupled with other PS4 services, although some caching and optimization are inherently provided with this service. This service is provided in the unit of 40Mbps of proxy.

Service 1B—PS4 Forward Proxy

The PS4 Forward Proxy Service locally caches Internet content from arbitrary Internet or NIPRNet Web sites. The service is designed to optimally support users that are in the vicinity of the PS4 node.

The PS4 Forward Proxy Service greatly reduces response times for commonly accessed Web sites and can also provide significant bandwidth reduction for wide area links that are otherwise congested and in need of costly upgrade. It is sold in units of 40Mbps of usage. While the service does not limit what Web sites can be cached, its most efficient use is with commonly used informational Web sites.

Service 2 – PS4 Multi-Protocol Network Attached Storage (NAS)

The PS4 Multi-Protocol NAS service is a standard centrally managed storage solution that solves distance problems by moving certain file structures closer to the user. It enables you to consolidate servers or data centers and to retire point edge storage solutions without disrupting support to your user base. It allows you to place highly available, local storage at the edge of the network, close to your users without having to place your server or data center resources there as well. Because it replicates data, the PS4 Multi-Protocol NAS service provides a local data backup solution for remote users and a means of disaster recovery for all users. It is sold by the unit of one TB. It is accessible by FTP, NFS, and CIFS. The service also provides, at no extra charge, a five license SSL VPN capability that allows the NAS to be integrated seamlessly into a customer Active Directory environment at arbitrary locations.

The PS4 Multi-Protocol NAS service includes the following functionality:

- File pre-positioning for deployed users.
- Scalable to meet storage needs (1 TB to 50 TB with NAS head and tiers).
- Data replication to the primary backend data center storage.
- Data encryption support, using FIPS 140-2 VPN.
- Aggregation of enclave NAS and SAN systems on the NAS head.
- Use of DFS, NFS, and CIFS protocols.
- Support of native Windows Active Directory participation.

Service 3 – PS4 TCP Optimization

The PS4 TCP Optimization service dramatically increases performance for remote users who are experiencing poor network performance in terms of repeated transmissions, inaccessible data during file transfers, and slowness of patch distribution, server connections, search query results, and file downloads.

The PS4 TCP Optimization service sets the stage for migration to server-less branch/node by demonstrating robustness of optimized applications residing in data centers; improves response times of time sensitive applications over the WAN, and negates the need for bandwidth upgrades. It is meant to be used in a point-to-point fashion and it can optimize any TCP applications flows. It is sold on a per flow basis, which translates to connectivity between any two hosts appearing as if they are local.

The PS4 TCP Optimization service includes the following functionality:

Accelerated traffic flow via:

- Compression
- Byte caching

- Object caching
- Bandwidth management

Service 4 – PS4 On-Demand Ad-Hoc Networks

The PS4 On-Demand Ad-Hoc Networks service enables you to perform quick stand up of secure geographically independent community of interest (COI) networks for cross service, agency, department, and coalition collaboration. Using the PS4 On-Demand Ad-Hoc Networks services, you can add users to your network dynamically and provide them with secure access to internal applications and NAS without the need to distribute software to them. The distributed nature of this service also provides built-in redundancy and is provided in one 50 SSL VPN block per community.

The PS4 On-Demand Ad-Hoc Networks service includes the following functionality:

- Secure access to the network, using CAC and Active Directory.
- PC, handheld, and the COI network support.

- Extension of port, protocol, and service boundaries out to the node, which can be enforced from anywhere.
- Data encryption across the network with FIPS 140-2 SSL VPN.
- Geographically-independent collaboration via DMVPN backbone.
-

Service 5 – PS4 High-Availability Firewall

The PS4 High-Availability Firewall service is a virtual firewall service that takes advantage of the location at the network boundary, allowing customer network administrators to build specific rule sets that are executed on PS4 firewalls.

Each instance of the service is isolated from other customers. The unique PS4 virtual networking features allow any unclassified CAL boundary to be policed. The firewall service is implemented as a stateful inspection platform with common criteria EAL 2 certification. It is provided in units of 10Mbps and 500 rule objects. It is most effectively used in pairs to provide a high availability solution.

Service 6 – PS4 Global Load Balancing

The PS4 Global Load Balancing service can be used as a distributed server and high availability solution and offers many distribution algorithms to choose from. PS4 Load Balancing is a free service if used in conjunction with other PS4 services but is priced separately when purchased as a standalone service. This service is provided by the unit of virtual server.

Service 7 – PS4 Operating Environment

The PS4 Virtual Hosting service mission is to provide a hosting environment infrastructure that can be readily implemented and accessed. It is an excellent location to host Enclave A through Enclave C applications or Production environments without having to purchase the hardware to support it. As with other PS4 services, it can provide high availability through multiple locations and multiple access points. Coupled with the other PS4 services, hosting services can provide a location to run disaster recovery application testing. Granular access can be authenticated based on customer based access methodologies to the virtualized applications. Using other services, the virtual hosting environment can provide a location to rapidly stand up image archives if needed because of application corruption or to run in a location closer to the users. It is sold on an operating unit basis, which translates to a single CPU 1 Ghz, 1GB RAM, 50GB disk (RAID) and has cold backup capability.

HEALTH INFORMATION TECHNOLOGY SERVICES

Health IT Services to include:

- Connected health, electronic health records, health information exchanges health analytics, personal health information management
- Innovative Health IT solutions, health informatics
- Emerging Health IT research
- Other Health IT services

SIN 54151HEAL – Health IT Labor Category Requirements and Descriptions

LABOR CATEGORIES, EDUCATION AND YEARS OF EXPERIENCE

No.	Labor Categories	Education	Years Experience
ANT-001H	Technical Expert Level 5	BA/BS	6
ANT-002H	Technical Expert Level 4	BA/BS	8
ANT-003H	Technical Expert Level 3	MA/MS	10
ANT-004H	Technical Expert Level 2	MA/MS	12
ANT-005H	Technical Expert Level 1	PhD	15
ANT-006H	Project Manager/Task Lead	BA/BS	7
ANT-007H	Program Manager	BA/BS	10
ANT-008H	Sr. Program Manager	BA/BS	12
ANT-009H	Proprietary Product Application Developer	*	*
ANT-010H	Proprietary Product Application Designer	*	*
ANT-011H	Proprietary Product Database Administrator	*	*
ANT-012H	Proprietary Product System Architect	*	*
ANT-013H	Business Process Reengineering Analyst	*	*
ANT-015H	Scientist	BA/BS	2
ANT-016H	Staff Scientist	BA/BS	5
ANT-017H	SR Scientist	MA/MS	8
ANT-018H	Principal Scientist	MA/MS	10
ANT-019H	SR Principal Scientist	PhD	15
ANT-023H	JR Systems Engineer	BA/BS	*
ANT-024H	Systems Engineer	BA/BS	3
ANT-025H	Staff Systems Engineer	BA/BS	6
ANT-026H	SR Systems Engineer	BA/BS	8
ANT-027H	Principal Systems Engineer	BA/BS	10
ANT-028H	SR Principal Systems Engineer	MA/MS	15
ANT-029H	Information Engineer	BA/BS	5
ANT-030H	SR Information Engineer	BA/BS	8
ANT-031H	Principal Information Engineer	BA/BS	10
ANT-032H	JR Software Engineer	BA/BS	*
ANT-033H	Software Engineer	BA/BS	2
ANT-034H	Staff Software Engineer	BA/BS	3
ANT-035H	SR Software Engineer	BA/BS	5
ANT-036H	Principal Software Engineer	MA/MS	8
ANT-037H	Software Architect	MA/MS	10
ANT-038H	Computer Security Specialist	BA/BS	7
ANT-039H	SR Computer Security Systems Specialist	BA/BS	10
ANT-040H	JR Database Architect	BA/BS	2
ANT-041H	Database Architect	BA/BS	3
ANT-042H	SR Database Architect	BA/BS	5
ANT-045H	Computer Programmer/Analyst	BA/BS	3
ANT-046H	Staff Computer Programmer/Analyst	BA/BS	4
ANT-047H	SR Computer Programmer/Analyst	BA/BS	5
ANT-048H	Principal Computer Programmer/Analyst	BA/BS	8

No.	Labor Categories	Education	Years Experience
ANT-049H	Computer Systems Programmer	BA/BS	5
ANT-050H	Web Designer	BA/BS	2
ANT-051H	Web Developer	BA/BS	4
ANT-052H	SR Web Developer	BA/BS	8
ANT-053H	Web Tech Administrator	BA/BS	4
ANT-054H	Web Content Manager	BA/BS	2
ANT-055H	Web Security Administrator	BA/BS	4
ANT-057H	Computer Systems Analyst	BA/BS	3
ANT-058H	Staff Computer Systems Analyst	BA/BS	5
ANT-059H	SR Computer Systems Analyst	BA/BS	8
ANT-060H	Principal Computer Systems Analyst	BA/BS	10
ANT-061H	Legacy System Analyst	*	*
ANT-062H	JR Functional Analyst/Specialist	BA/BS	1
ANT-063H	Functional Analyst/Specialist	BA/BS	5
ANT-064H	SR Functional Analyst/Specialist	BA/BS	7
ANT-065H	Principal Functional Analyst/Specialist	MA/MS	8
ANT-066H	SR Principal Functional Analyst/Specialist	MA/MS	10
ANT-067H	Data Management Specialist	BA/BS	6
ANT-068H	Data Administrator	BA/BS	6
ANT-069H	Data Manager	BA/BS	7
ANT-070H	Computer Operations Manager	AA/AS	6
ANT-071H	SR Computer Operations Manager	BA/BS	8
ANT-076H	Communications Engineer	BA/BS	6
ANT-077H	SR Communications Engineer	BA/BS	10
ANT-078H	JR Network Engineer	BA/BS	*
ANT-079H	Network Engineer	BA/BS	2
ANT-080H	Staff Network Engineer	BA/BS	5
ANT-081H	SR Network Engineer	MA/MS	8
ANT-082H	Principal Network Engineer	MA/MS	10
ANT-083H	Network Administrator	BA/BS	7
ANT-084H	SR Network Administrator	BA/BS	8
ANT-088H	Network/Computer Support Specialist	BA/BS	3
ANT-089H	Computer System/Network Integration Engineer	*	*
ANT-092H	SR Telecommunications Analyst	AA/AS	3
ANT-093H	Communications Network Manager	BA/BS	6
ANT-102H	Hardware Specialist	BA/BS	5
ANT-103H	Quality Assurance/IV&V Analyst	BA/BS	2
ANT-104H	Quality Assurance/IV&V Specialist	BA/BS	4
ANT-105H	Quality Assurance/IV&V Manager	BA/BS	7
ANT-108H	Configuration Management Specialist	BA/BS	5
ANT-109H	SR Configuration Management Specialist	BA/BS	7
ANT-111H	Training Specialist/Instructor	BA/BS	4
ANT-112H	SR Training Specialist/Instructor	BA/BS	6
ANT-114H	Training Specialist	AA/AS	3
ANT-115H	SR Training Specialist	AA/AS	7
ANT-116H	Principal Training Specialist	AA/AS	10
ANT-119H	Testing and Validation Specialist	BA/BS	*
ANT-121H	Principal Testing and Validation Specialist	MA/MS	5
ANT-123H	Instructional System Designer	BA/BS	2
ANT-124H	SR Instructional System Designer	MA/MS	5
ANT-128H	Staff Graphics Design Specialist	AA/AS	5
ANT-129H	SR Graphics Design Specialist	AA/AS	8
ANT-130H	Principal Graphics Design Specialist	AA/AS	9

No.	Labor Categories	Education	Years Experience
ANT-133H	Contract Administrator	BA/BS	2
ANT-134H	SR Contract Administrator	BA/BS	5
ANT-137H	Program Management Specialist	BA/BS	3
ANT-138H	SR Program Management Specialist	BA/BS	6
ANT-139H	Principal Program Management Specialist	BA/BS	8
ANT-148H	SR Documentation Specialist	AA/AS	8
ANT-150H	Technical Editor	BA/BS	5

* See Labor Category Descriptions for Specialized Training and Minimum Qualifications

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

Education/Experience Substitutions

The following presents the allowable substitutions based on education and experience:

Four (4) years' experience (in addition to minimum experience requirements) may be substituted for a Bachelor's degree.

Two (2) years' experience (in addition to minimum experience requirements and Bachelor's degree) may be substituted for a Master's degree.

Two (2) years' experience (in addition to minimum requirements and Master's degree) may be substituted for a Ph.D.

For categories where a Bachelor's degree is required, a Master's degree may be substituted for two (2) years' experience; or a doctoral degree may be substituted for three (3) years' experience.

Successful completion of each course in specialized or emerging technology (Windows 2000/XP, Oracle, Powerbuilder, Web development, internet/intranet security, and XML, etc.) may be substituted for one year of experience.

For the categories of JR Network Engineer, Network Engineer, Staff Network Engineer, and Communications Network Manager, a Certificate in a related technology (certified Network Engineer, for example) may be substituted for the degree requirement.

SIN 54151HEAL - LABOR CATEGORY DESCRIPTIONS

ANT-001H Technical Expert Level 5

Minimum/General Experience: Experience qualifications will be determined on a case-by-case basis. Generally, this requires six years of general experience in Health information systems, including four years of specialized experience providing state-of-the art solutions in Health information systems technology (or, if the particular area of expertise is new state-of-the-art technology, the specialized experience may be less than four years and more consistent with the age of the technology). Performs highly specialized and technical tasks associated with the most current and cutting-edge Health information technologies. May serve as a technical consultant to a project or a number of projects dealing with area of technical expertise. Generally recognized as a leader in the industry in their area of expertise, sought out by others in their area of expertise for advice and guidance.

Functional Responsibility: Provide expert, independent services and leadership in specialized technical areas. Provides expertise on an as-needed basis to all task assignments. Provides expert advice and assistance in state-of-the-art software/hardware. Coordinates with contractor management and Government personnel to ensure that the problem has been properly defined and that the solution will satisfy the Government's requirement.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	10 years
AA/AS	8 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-002H Technical Expert Level 4

Minimum/General Experience: Experience qualifications will be determined on a case-by-case basis. Generally this requires eight years of general experience in Health information systems, including six years of specialized experience providing state-of-the-art solutions in Health information systems technology (or, if the particular area of expertise is new state-of-the-art technology, the specialized experience may be less than six years and more consistent with the age of the technology). Recognized expert in the technology being addressed.

Functional Responsibility: Provide expert, independent services and leadership in specialized technical areas. Provides expertise on an as-needed basis to all task assignments. Provides expert advice and assistance in state-of-the-art software/hardware. Coordinates with contractor management and Government personnel to ensure that the problem has been properly defined and that the solution will satisfy the Government's requirement.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-003H Technical Expert Level 3

Minimum/General Experience: Experience qualifications will be determined on a case-by-case basis. Generally this requires ten years of general experience in Health information systems, including eight years of specialized experience providing state-of-the-art solutions in Health information systems technology (or, if the particular area of expertise is new state-of-the-art technology, the specialized experience may be less than eight years and more consistent with the age of the technology). Recognized expert in the technology being addressed.

Functional Responsibility: Provide expert, independent services and leadership in specialized technical areas. Provides expertise on an as-needed basis to all task assignments. Provides expert advice and assistance in state-of-the-art software/hardware. Coordinates with contractor management and Government personnel to ensure that the problem has been properly defined and that the solution will satisfy the Government's requirement.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	16 years
AA/AS	14 years
BA/BS	12 years
Doctorate Degree/Ph.D.	9 years

ANT-004H Technical Expert Level 2

Minimum/General Experience: Experience qualifications will be determined on a case-by-case basis. Generally this requires twelve years of general experience in Health information systems, including ten years of specialized experience providing state-of-the-art solutions in Health information systems technology (or, if the particular area of expertise is new state-of-the-art technology, the specialized experience may be less than ten years and more consistent with the age of the

technology.

Functional Responsibility: Provide expert, independent services and leadership in specialized technical areas. Provides expertise on an as-needed basis to all task assignments. Provides expert advice and assistance in state-of-the-art software/hardware. Coordinates with contractor management and Government personnel to ensure that the problem has been properly defined and that the solution will satisfy the Government's requirement.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	18 years
AA/AS	16 years
BA/BS	14 years
Doctorate Degree/Ph.D.	11 years

ANT-005H Technical Expert Level 1

Minimum/General Experience: Experience qualifications will be determined on a case-by-case basis. Generally this requires fifteen years of general experience in Health information systems, including ten years of specialized experience providing state-of-the-art solutions in Health information systems technology (or, if the particular area of expertise in new state-of-the-art technology, the specialized experience may be less than ten years and more consistent with the age of the technology). Recognized expert in the technology being addressed.

Functional Responsibility: Provide expert, independent services and leadership in specialized technical areas. Provides expertise on an as-needed basis to all task assignments. Provides expert advice and assistance in state-of-the-art software/hardware. Coordinates with contractor management and Government personnel to ensure that the problem has been properly defined and that the solution will satisfy the Government's requirement.

Minimum Education: Doctorate Degree/Ph.D.

Approved Substitutions	
Education	**Experience**
HS	22 years
AA/AS	20 years
BA/BS	18 years
MA/MS	16 years
Doctorate Degree/Ph.D.	15 years

ANT-006H Project Manager/Task Lead

Minimum/General Experience: Must have seven years of general experience including five years of specialized Health IT experience of which two years were direct supervisory experience.

Functional Responsibility: Monitors each task, and keeps the Program Manager abreast of all problems and accomplishments. Anticipates problems, and works to mitigate the anticipated problems. As a team or project leader, provides technical direction for the complete systems development effort. May serve as a technical authority for a design area. As a staff specialist or consultant, resolves unique and unyielding systems problems using new technology. Can complete tasks within estimated time frames and budget constraints. Schedules and assigns duties to subordinates. Interacts with government management personnel. Reports in writing and orally to contractor management and government representatives, including the government contracting officer.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
MA/MS	5 years
Doctorate Degree/Ph.D.	4 years

ANT-007H Program Manager

Minimum/General Experience: Must have at least ten years' experience, of which at least six years must be specialized in Health IT. Specialized experience includes: complete engineering project development from inception to deployment, demonstrated ability to provide guidance and direction in the tasks similar to the sample tasks provided in the statement of work, proven expertise in the management and control of funds and resources, demonstrated capability in managing multi-task contracts of this type and complexity. General experience includes increasing responsibilities in information systems design and management.

Functional Responsibility: Serves as the contractor's contract manager, and shall be the contractor's authorized interface with the Government Contracting Officer (CO), the Contracting Officer's Representative (COR), government management personnel and customer agency representatives. Responsible for formulating and enforcing work standards, assigning contractor schedules, reviewing work discrepancies, supervising contractor personnel and communicating policies, purposes, and goals of the organization to subordinates. Shall be responsible for the overall contract performance. Ability to manage and ensure the successful completion multiple technical tasks in assigned program(s)

Minimum Education: BA/BS

Approved Substitutions

Education	Experience
HS	14 years
AA/AS	12 years
MA/MS	8 years
Doctorate Degree/Ph.D.	7 years

ANT-008H Sr. Program Manager

Minimum/General Experience: Must have twelve years' experience, of which at least five years must be supervisory experience in the Health IT arena. Must have the ability to manage and ensure the successful completion of multiple technical tasks in assigned program(s). Must have the ability to recruit, hire, manage, supervise, train, schedule, coordinate, and evaluate staff as assigned.

Functional Responsibility: Responsible for managing very complex and/or high risk programs. Directs daily staff and task activities to meet client and corporate work objectives. Supervises assigned technical and administrative staff, including subordinate managers. Assures quality of task products, services, and deliverables, including participating in reviews, audits, and site visits. Serves as a liaison with clients to coordinate activities, negotiate tasks, and solve problems. Responsible for coordinating and monitoring subcontractor activities.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	16 years
AA/AS	14 years
MA/MS	10 years
Doctorate Degree/Ph.D.	9 years

ANT-009H Proprietary Product Application Developer

Minimum/General Experience: Completed three proprietary product courses such as Oracle 9i Forms, Oracle 9iAS Release 2PL/SQL, and Oracle 9i J2EE, and at least one year experience performing application development or; received a certification level with the proprietary product (such as Lotus Notes) and at least one year of experience performing applications development, in a broad based ADP setting. One year development experience using high technology and/or emerging technology proprietary software including but not limited to Oracle Application Development Products, Powerbuilder, Lotus Notes, Windows NT, JAVA, Visual C++, Netscape, and other Internet developer and applicator tools. Must have excellent communication skills both written and oral.

Functional Responsibility: Participates in the development of modernized software applications using high technology and/or emerging technology proprietary software.

ANT-010H Proprietary Product Application Designer

Minimum/General Experience: Completed four proprietary product courses such as Data Modeling and Relational Database Design, Oracle IDS Designer, Managing Development Using Oracle Repository, and Oracle 9iAS: Develop Web Based Applications with PL/SQL, Introduction to Design Proprietary Product (such as Oracle SQL, Powerbuilder, Windows NT) and at least one year of experience performing analysis, design and development, or; received a certification level with the proprietary product (such as Lotus Notes) and at least one year of experience performing analysis, design and development or four years of intensive and progressive experience performing analysis, design and development on contemporary hardware using contemporary languages, two years of experience performing design and development using high technology and/or emerging technology CASE technology such as Oracle CASE products, Rational Rose, or UML. Must have excellent communication skills both written and oral.

Functional Responsibility: Performs high-level analysis and design tasks associated with the overall design of application systems using one or more high technology or emerging technology proprietary product tools. Directs emerging technology software development programs to include system and subsystem design and implementation. Works directly with the customer to define requirements.

ANT-011H Proprietary Product Database Administrator

Minimum/General Experience: Completed 3 proprietary product courses such as Oracle 9i DBA Fundamentals II, Oracle 9i Database Performance Tuning, Enterprise DBA Part 1A: Architecture and Administration, and at least two years experience in all phases of system analysis, data base administration, or five years of intensive and progressive experience in all phases of systems analysis, design and development. Three years experience as a database administrator for proprietary product RDBMS, such as ORACLE. Must have experience as Database Administrator with the latest commonly used version of the relevant RDBMS.

Functional Responsibility: Creates and manages the database. Performs exceptionally complex database administration functions which include, but is not limited to, managing/maintaining distributed relational databases residing in a central system. Provides 24 x 7 support for production issues.

ANT-012H Proprietary Product System Architect

Minimum/General Experience: Completed 4 proprietary product courses such as SQL and PL/SQL.

Data Modeling and Relational Database Design, Oracle 9i Forms, Oracle 9iAS: Develop Web Based Applications with PL/SQL, and at least one year of experience in application design and development, or; completed three proprietary product courses and at least two years of experience in application design and development, or; six years experience in performing application development in a broad based ADP setting including two years of extensive experience in proprietary product architect tools such as Oracle Design/2000. Must have experience in the latest commonly used version of proprietary product such as Oracle RDBMS version 8.x or 9.x. Must have excellent communication skills both written and oral.

Functional Responsibility: Participates in all phases of system design and development of complex applications generally in a client/server environment using a variety of proprietary product or emerging technology tools in a variety of operating environments. Works closely with the customer to validate system design and architecture.

ANT-013H Business Process Reengineering Analyst

Minimum/General Experience: Completed a minimum of 3 courses in Information Engineering & Business Process Reengineering Methodologies such as Activity Based Costing, IDEF Modeling, Facilitation, and two years' experience performing analysis projects, or; five years' experience, of which at least two years must be specialized in the implementation of information engineering projects using IE tools and methods. Two years business/functional experience is desirable, to support the business modeling.

Functional Responsibility: Applies business process improvement practices to reengineer methodologies/principles and business process modernization projects. Applies, as appropriate, activity and data modeling, transaction flow analysis, internal control and risk analysis and modern business methods and performance measurement techniques.

ANT-015H Scientist

Minimum/General Experience: Requires at least two years' experience within Health IT arena. Also requires knowledge of the principles, methods, and techniques used in scientific functional area(s) and knowledge of the associated equipment and systems used in assigned scientific functional area(s).

Functional Responsibility: Initiates and executes scientific research and/or development studies; analyzes problems and develops experimental or theoretical techniques for formalized engineering or scientific studies; resolves a variety of technical problems leading to advanced engineering studies designed to increase efficiency or reduce costs; plans and executes laboratory research; analyzes and organizes technical data and reports into summaries for management or customer review; demonstrates creative ability through patent disclosures or published papers; prepares technical manuals, reports and procedures reflecting advanced knowledge in assigned area of expertise; defines and describes laboratory tests to be performed; participates in test programs and prepares reports of test results; participates in special projects as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-016H Staff Scientist

Minimum/General Experience: Requires at least five years' experience within Health IT arena. Also requires knowledge of the principles, methods, and techniques used in scientific functional area(s) and knowledge of the associated equipment and systems used in scientific functional area(s).

Functional Responsibility: Initiates and executes scientific research and/or development studies; analyzes problems and develops experimental or theoretical techniques for formalized engineering or scientific studies; carries out development and testing of programs on systems, components and materials concurrent with design, fabrication or testing to better evaluate and minimize future problems; plans and executes laboratory research; develops alternative solutions to existing problems; uses specialized techniques and ingenuity to select and evaluate approaches to unforeseen or unique problems; performs or delegates all detail work necessary to determine optimum solutions; evaluates proposals and makes recommendations based on sound scientific principles and practical considerations; may provide work leadership for lower level employees; prepares cost and schedule estimates and technical documents on proposed projects in assigned area; demonstrates creative ability through patent disclosures, problem solving, scientific reports or technical papers and articles; participates in special projects as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-017H SR Scientist

Minimum/General Experience: Requires at last eight years' experience in Health IT arena. Also requires advanced knowledge of the principles, methods, theories, and techniques used in scientific functional area(s), advanced knowledge of the associated equipment and systems used in scientific functional area(s), and ability to serve as a technical task or project lead.

Functional Responsibility: Initiates, directs, and executes scientific research and/or development studies; may serve as a technical team or task lead; plans and performs scientific duties on new and varied problems where only general objectives are stated; coordinates broad phases of a project and performs advanced development work to obtain or maintain technical leadership in assigned field; plans and executes laboratory research; plans scientific effort in coordination with related efforts of other projects, departments, etc.; establishes and defines the theoretical bases and principles which should apply and the empirical test procedures to be used; conducts investigations or tests pertaining to the development of new designs, methods, materials, or processes and investigates possible applications of results; interprets and evaluates test data and results of investigations and develops recommendations; recommends necessary corrections in technical analyses and design to ensure successful project completion; may provide technical consultation in area of specialty; may serve as a technical team or task lead; demonstrates creative ability through patent disclosures, problem solving, scientific reports or technical papers and articles; participates in special projects as required.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	14 years
AA/AS	12 years
BA/BS	10 years
Doctorate Degree/Ph.D.	7 years

ANT-018H Principal Scientist

Minimum/General Experience: Requires at least ten years' experience in a specific Health IT scientific field. Also requires advanced knowledge of the principles, methods, theories, and techniques used in scientific functional area(s), as well as associated equipment and systems used in scientific functional area(s). Must also have the ability to serve as a technical team or task lead.

Functional Responsibility: Initiates, directs, and executes advanced-level scientific research and/or development studies. Plans and performs advanced scientific studies on new and varied problems where only general objectives are stated; acts as technical liaison with customers and sponsors, to include the preparation and presentation of high-level technical information; interprets, organizes, and coordinates overall project assignments within an assigned scientific functional area; plans and executes laboratory research; analyzes, evaluates, and plans methods of approach for projects and organizes means to achieve the solution of problems; serves as technical team or task lead; may provide supervision to lower-level staff; establishes and defines the theoretical bases and principles which should apply and the empirical test procedures to be used; conducts complex investigations or tests pertaining to the development of new designs, methods, materials, or processes and investigates possible applications of results; interprets and evaluates test data and results of investigations and develops recommendations; recommends necessary corrections in technical analyses and design to ensure successful project completion; specifies equipment, materials and suppliers required for completion and implementation of projects; evaluates vendor capabilities to provide or build required services, supplies, or equipment; maintains a current knowledge of technologies through the careful review of reports, patents, literature and other data; demonstrates creative ability through patent disclosures, problem solving, scientific reports or technical papers and articles; participates in special projects as required.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	16 years
AA/AS	14 years
BA/BS	12 years
Doctorate Degree/Ph.D.	9 years

ANT-019H SR Principal Scientist

Minimum/General Experience: Requires over fifteen years' experience in a specific Health IT scientific field. Also requires advanced knowledge of the principles, methods, theories, and techniques used in scientific functional area(s), advanced knowledge of the associated equipment and systems used in scientific functional area(s), and the ability to serve as a technical team or task lead and supervise and direct the work of assigned staff.

Functional Responsibility: Makes decisions and recommendations that are recognized as authoritative and have an important impact on extensive scientific activities of the organization. This individual acts as primary technical liaison with customers and sponsors, to include the preparation and presentation of high-level technical information; analyzes, evaluates, and plans methods of approach for projects and organizes means to achieve the solution of problems; serves as technical team or task lead; supervises and directs the work of lower-level scientific and technical personnel; plans and executes laboratory research and/or the development and/or evaluation of advanced physics or first-principles engineering models; establishes and defines the theoretical bases and principles which should apply and the empirical test procedures to be used; conducts complex investigations or tests pertaining to the

development of new designs, methods, materials, or processes and investigates possible applications of results; interprets and evaluates test data and results of investigations and develops recommendations; recommends necessary corrections in technical analyses and design to ensure successful project completion; specifies equipment, materials and suppliers required for completion and implementation of projects; evaluates vendor capabilities to provide or build required services, supplies, or equipment; maintains a current knowledge of technologies through the careful review of reports, patents, literature and other data; demonstrates creative ability through patent disclosures, problem solving, scientific reports or technical papers and articles; participates in special projects as required.

Minimum Education: Doctorate Degree/Ph.D.

Approved Substitutions	
Education	**Experience**
HS	22 years
AA/AS	20 years
BA/BS	18 years
MA/MS	16 years

ANT-023H JR Systems Engineer

Minimum/General Experience: Requires no experience and knowledge of the principles, methods, and techniques used in the engineering, development, maintenance, and application of multiple operating systems; knowledge of or certification in one or more specific applications or processes may be required, depending on job assignment; must have the ability to write, maintain, and modify technical documentation/specifications.

Functional Responsibility**:** Assists in the design, development, analysis, installation, maintenance, operation and servicing of computer operating/hardware systems; provides customer support; works under direct supervision; does related work as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	4 years
AA/AS	2 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-024H Systems Engineer

Minimum/General Experience: Must have three years' experience of which at least one year must be specialized. Specialized experience includes: analytically solving workflows, organization, and/or planning problems. General experience includes increasing responsibilities in systems engineering.

Functional Responsibility: Designs software tools and subsystems to support software reuse and domain analysis. Interprets software requirements and design specifications to code, and integrates and tests software components.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	7 years
AA/AS	5 years
MA/MS	1 years
Doctorate Degree/Ph.D.	0 years

ANT-025H Staff Systems Engineer

Minimum/General Experience: Must have six years' experience, of which at least three must be specialized. Specialized experience includes: supervision of system engineers, and demonstrated use of interactive, interpretative systems with on-line, real-time acquisition capabilities. General experience includes increasing responsibilities in systems engineering.

Functional Responsibility: Analyzes and studies complex system requirements. Designs software tools and subsystems to support software reuse and domain analyses and manages their implementation. Manages software development and support using formal specifications, data flow diagrams, other accepted design techniques and CASE tools. Estimates software development costs and schedule. Reviews existing programs and assists in making refinements, reducing operating time, and improving current techniques. Supervises software configuration management

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	10 years
AA/AS	8 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-026H SR Systems Engineer

Minimum/General Experience: Must have eight years' directly related experience in all phases of systems engineering. Also requires advanced knowledge of the principles, methods, and techniques used in all phases of the engineering, application, and development of multiple operating systems; knowledge of or certification in specific applications or processes may be required, depending on job assignment.

Functional Responsibility: Participates in all phases of computer operating/hardware systems engineering, including design, analysis, and modeling at a highly technical level; analyzes complex computer software/hardware requirements to provide integration and implementation support; performs operating/hardware systems engineering, including full life cycle design and development; analyzes and documents users' functional and data requirements; develops site survey instruments to gather detailed user requirements and business process analysis data; conducts functional user interviews to document functional, system, customization, and data requirements and data sources; formulates system concepts and architecture, specifies requirements, and develops implementation approaches; determines data requirements for internal processes and external interfaces; develops new systems or tailors commercial products to meet user requirements; directs and coordinates all activities necessary to complete a major engineering project or several small projects to specification and on schedule; may serve as task or project lead, exercising leadership in either a technical role training other hardware engineers and implementing and enforcing established standards and technologies, or in a project coordination role leading tasks and assuming responsibility for the design, development, test and delivery of a software system or application;

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-027H Principal Systems Engineer

Minimum/General Experience: Must have ten years' directly related experience in all phases of systems engineering. Requires advanced knowledge of the principles, methods, and techniques used in all phases of the engineering, application, and development of multiple operating systems; knowledge of or certification in specific applications or processes may be required, depending on job assignment.

Functional Responsibility: Establishes state-of-the-art techniques for designing, developing, modifying and troubleshooting highly complex computer operating/hardware system; may work independently on projects requiring advanced, concentrated and diversified knowledge regarding engineering principles in broad assignment areas or may serve as project lead with supervisory responsibilities. Designs operating/hardware systems; formulates system concepts and architecture, specifies requirements, and develops implementation approaches; identifies and directs resolution of complex hardware/software interface issues; subject matter expert on emerging technologies; directs the development of systems specifications and technical documentation; may serve as project lead, either working independently in a technical role in field of specialization, or in providing work leadership with management or supervisory responsibility for the group;

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-028H SR Principal Systems Engineer

Minimum/General Experience: Must have fifteen years' directly related experience in all phases of systems engineering. Also requires advanced knowledge of the principles, methods, and techniques used in all phases of the engineering, application, and development of multiple operating systems; knowledge of or certification in specific applications or processes may be required, depending on job assignment.

Functional Responsibility: Works at the highest systems level to provide expert advice and counsel to assigned functional/user area managers and project teams for systems of the most complex nature, often crossing functional lines. Designs major computer systems; coordinates work on subsystems; oversees the integration of new applications with established systems and files; confers with assigned systems users and evaluates utilization to identify requirements modifications which will facilitate integration, increase efficiency and/or reduce costs; investigates new procedures, equipment and operating systems to determine their usefulness and applicability to operations; assists systems management in developing systems analysis standards and provides consultative direction to applications programmers, systems software engineers, computer center operations and user personnel in the planning and scheduling of systems projects which cross functional lines or are of the most complex nature.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	17 years
AA/AS	15 years
BA/BS	13 years
Doctorate Degree/Ph.D.	14 years

ANT-029H Information Engineer

Minimum/General Experience: Must have a

minimum of five years' experience, of which at least two years must be specialized in Health information systems development, functional and data requirements analysis, systems analysis and design, programming, program design and documentation preparation. The following experience is also required: two years' experience in the implementation of information engineering projects and experience in systems analysis; design and programming using CASE and IE tools and methods. Two years business/functional experience is desirable, to support the business modeling activities. Must demonstrate the ability to work independently or under only general direction.

Functional Responsibility: Applies a business-wide set of disciplines for the planning, analysis, design and construction of information systems on a business-wide basis or across a major sector of the business. Performs business strategic systems planning, information planning, business and analysis. Performs process and data modeling in support of the planning and analysis efforts using both manual and automated tools such as Integrated Computer Aided Software Engineering (I-CASE) tools. Applies reverse engineering and reengineering disciplines to develop migration strategic and planning documents. Provides technical guidance in software engineering techniques and automated support tools.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-030H SR Information Engineer

Minimum/General Experience: Must have at least eight years' experience, of which at least five must be specialized in Health information systems development, functional and data requirements analysis, systems analysis and design, programming, program design and documentation preparation. The following experience is also required: demonstrated experience in the implementation of information engineering projects; systems analysis, design and programming using CASE and IE tools and methods and three to five years of business or functional experience. Must demonstrate the ability to work independently or under only general direction.

Functional Responsibility: Applies business process improvement practices to reengineer methodologies/principles and business process modernization projects. Applies, as appropriate, activity and data modeling, transaction flow analysis, internal control and risk analysis and modern business methods and performance measurement techniques. Assist in establishing standards for information systems procedures. Develops and applies organization-wide information models for use in designing and building integrated, shared software and database management systems. Construct sound, logical business improvement opportunities consistent with the CIM guiding principles, cost savings, and open system architecture objectives. Provides daily supervision and direction to staff.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-031H Principal Information Engineer

Minimum/General Experience: Must have at least ten years' experience in Health information systems development, functional and data requirements analysis, systems analysis and design, programming, program design and documentation preparation. A minimum of five years' experience is required in the following: demonstrated experience in managing the implementation of information engineering projects and experience in systems analysis, design and programming using CASE and IE tools and methods. Proven managerial and supervisory skills. Demonstrated exceptional written and oral communications skills, including giving formal presentations to different audiences. Must demonstrate the ability to work independently or under only general direction.

Functional Responsibility: Applies an enterprise-wide set of disciplines for the planning, analysis, design and construction of information systems on an enterprise-wide basis or across a major sector of the enterprise. Develops analytical and computational techniques and methodology for problem solutions. Performs enterprise-wide strategic systems planning, business information planning, business and analysis. Performs process and data modeling in support of the planning and analysis efforts using both manual and automated tools such as Integrated Computer Aided Software Engineering (I-CASE) tools. Applies reverse engineering and re-engineering disciplines to develop migration strategic and planning documents. Provides technical guidance in software engineering techniques and automated support tools.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	14 years
AA/AS	12 years
MA/MS	8 years

Doctorate Degree/Ph.D.	7 years

ANT-032H JR Software Engineer

Minimum/General Experience: Requires no experience and knowledge of the fundamental concepts, practices and procedures used in software engineering and applications and systems development.

Functional Responsibility: Assists in the design, development, analysis, and implementation of software operating systems and software application programs; works under general supervision; does related work as required. Works from specifications to develop and modify operating systems and software applications; participates in the design, coding, testing, debugging, and documentation of programs; assists in the definition of limited design specifications and parameters; assists engineers or analysts with the hardware/software integration of the application or utility into software operating systems; assists in the analysis of system architecture requirements; may customize purchased applications; participates in the research of emerging technologies to determine impacts on application execution; analyzes and documents client needs and requirements; assists with writing, modifying, and maintaining technical documentation and specifications such as user manuals, system documentation, and training materials; performs integration testing and support of various computer operating and/or network systems; troubleshoots and provides customer support for software operating system and application issues; maintains current knowledge of relevant hardware and software applications as assigned.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	4 years
AA/AS	2 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-033H Software Engineer

Minimum/General Experience: Requires at least two years' directly related experience in Health IT software engineering, including the design, coding, testing, and documentation of computer programs. Also requires knowledge of the fundamental concepts, practices and procedures used in software engineering and applications and systems development.

Functional Responsibility: Participates in the design, development, analysis, and implementation of software operating systems and software application programs; works under general supervision; performs software operating systems and application engineering, including full life cycle design and development; works from specifications to develop and modify operating systems and software applications; participates in the design, coding, testing, debugging, and documentation of programs; participates in the definition of limited design specifications and parameters; assists engineers or analysts with the hardware/software integration of the application or utility into software operating systems; analyzes system architecture requirements; performs requirements acquisition and definition and data analysis; may customize purchased applications; performs technical and subject matter research on emerging technologies to determine impacts on application execution; analyzes and documents client needs and requirements; participates in the writing, modifying, and maintaining technical documentation and specifications such as user manuals, system documentation, and training materials; performs integration testing and support of various computer operating and/or network systems; troubleshoots and provides customer support for software operating system and application issues; maintains current knowledge of relevant hardware and software applications as assigned; participates in special projects as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-034H Staff Software Engineer

Minimum/General Experience: Requires at least three years' directly related experience in Health IT software engineering, including the design, coding, testing, and documentation of computer programs. Also requires knowledge of the fundamental concepts, practices and procedures used in software engineering and applications and systems development.

Functional Responsibility: Performs software operating systems and software application programs design, development, analysis, and implementation; performs software operating systems and application engineering, including full life cycle design and development; works under limited supervision; works from specifications to develop and modify operating systems and software programming applications; designs, codes, tests, debugs, and documents programs; defines limited design specifications and parameters; resolves hardware/software compatibility and interface design considerations; analyzes system architecture requirements; performs requirements acquisition and definition and data analysis; may customize purchased applications; conducts technical and subject matter research on emerging technologies to determine impacts on application execution; analyzes and documents client needs and requirements; participates in writing,

modifying, and maintaining technical documentation and specifications such as user manuals, system documentation, and training materials; performs integration testing and support of various computer operating and/or network systems; troubleshoots and provides customer support for software operating systems and application issues; maintains current knowledge of relevant hardware and software applications as assigned.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	7 years
AA/AS	5 years
MA/MS	1 years
Doctorate Degree/Ph.D.	0 years

ANT-035H SR Software Engineer

Minimum/General Experience: Requires at least five years' directly related experience in the design, writing, and testing of Health IT computer programs or database development. Also requires comprehensive knowledge of the principles, practices, and procedures used in all phases of full life cycle applications and systems development, engineering, programming, and analysis

Functional Responsibility: Participates in all phases of software operating systems and software application programs engineering, including design, analysis, and modeling at a highly technical level; Performs software operating systems and application engineering, including full life cycle application systems design and development; assesses system architecture and hardware limitations; defines and selects new concepts and approaches for the design, development, and implementation of software engineering applications; defines complex design specifications and parameters; resolves complex hardware/software compatibility and interface design considerations; performs requirements acquisition and definition and data analysis; directs research on emerging technologies to determine impacts on application execution; performs systems modeling; may perform database analysis, design, implementation, and testing; writes, modifies, and maintains technical documentation and specifications such as user manuals, system documentation, and training materials; performs integration testing and support of various computer operating and/or network systems; troubleshoots and provides customer support for software operating systems and application issues; analyzes and documents client needs and requirements; serves as liaison with clients, participates in meetings to ensure client needs are met and may make client presentations; may serve as task or team lead, exercising leadership in either a technical role training other software engineers and implementing and enforcing established standards and technologies, or in a project coordination role leading tasks and assuming responsibility for the design, development, test and delivery of a software system or application;

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-036H Principal Software Engineer

Minimum/General Experience: Requires at least eight years' directly related experience in the design, writing, and testing of Health IT computer programs or database development, with two or more years experience in software operating systems architecture. Also requires expert knowledge of the principles, practices, and procedures used in all phases of full life cycle applications and systems development, engineering, programming, and analysis at a highly technical level.

Functional Responsibility: Participates in all phases of software operating systems and software application programs engineering, including design, analysis, and modeling at an expert level; establishes state-of-the-art techniques for designing, developing, modifying and troubleshooting highly complex software operating systems and applications architectures; defines complex design specifications and parameters; identifies and directs resolution of complex hardware/software interface issues; can serve as a subject matter expert on emerging technologies; directs the development of systems specifications and technical documentation; may serve as project lead, either working independently in a technical role in field of specialization, or providing work leadership with management or supervisory responsibility for the group.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-037H Software Architect

Minimum/General Experience: Requires ten or more years' directly related experience in the design, writing, and testing of Health IT computer programs or database development, with four or more years experience in software operating systems architecture. Also requires expert knowledge of the principles, practices, and procedures used in all phases of full life cycle applications

and systems development, engineering, programming, and analysis at a highly technical level.

Functional Responsibility: Establishes state-of-the-art techniques for designing, developing, modifying and troubleshooting highly complex software operating systems and applications architectures; defines complex design specifications and parameters; identifies and directs resolution of complex hardware/software interface issues; is recognized as a subject matter expert in all areas of software engineering, including emerging technologies; directs the development of systems specifications and technical documentation; may serve as project lead, either working independently in a technical role in field of specialization, or providing work leadership with management or supervisory responsibility for the group; responsible for task cost, schedule and level of effort estimates; reports project progress directly to senior management; performs business development services; may provide expertise to multiple projects and tasks; may supervise and direct the work of assigned staff.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	16 years
AA/AS	14 years
BA/BS	12 years
Doctorate Degree/Ph.D.	9 years

ANT-038H Computer Security Specialist

Minimum/General Experience: Must have a minimum of seven years' experience, of which at least five years must be Health information security/Information Assurance (IA) experience. Must have experience in security administration, evaluation of security/Information Assurance product capabilities, assessment and policy development. Must have a solid understanding of federal information security/assurance policies, standards and regulations.

Functional Responsibility: Gathers and organizes technical information about an organization's mission goals and needs, IT infrastructure and existing security/IA products. Assists in developing security/IA policies, procedures and standards. Responsibilities will include working with the customer to minimize risks and assess and secure networks.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
MA/MS	5 years
Doctorate Degree/Ph.D.	4 years

ANT-039H SR Computer Security Specialist

Minimum/General Experience: Must have a minimum of ten years' experience, of which at least eight must be Health information security/Information Assurance (IA) experience. Must have experience in security administration, evaluation of security/Information Assurance product capabilities, assessment and policy development. Must have a solid understanding of federal information security/assurance policies, standards and regulations.

Functional Responsibility: Gathers and organizes technical information about an organization's mission goals and needs, IT infrastructure, and existing security/IA products. Assists in developing security/IA policies, procedures, and standards. Responsibilities will include working with the customer to minimize risks and assess and secure networks. Evaluates and recommends security products for various platforms and initiatives. May act as a project leader and provide technical leadership and guidance.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	14 years
AA/AS	12 years
MA/MS	8 years
Doctorate Degree/Ph.D.	7 years

ANT-040H JR Database Architect

Minimum/General Experience: Requires at least two years' directly related experience in the design, maintenance, and coding of Health IT databases. Also requires knowledge of the principles, methods, and techniques used in all phases of database development, coding, and design, including business analysis, event modeling, logical and physical database design, data access analysis and design, DBMS optimization, archive and recovery strategy, load strategy design and implementation, security, and change management.

Functional Responsibility: Participates in the design, maintenance, enhancement, and coding of relational databases; analyzes and determines information needs and elements, data relationships and attributes, data flow and storage requirements, and data output and reporting capabilities; assists on developing data modeling and participates in data acquisition and access analysis and design, and archive, recovery, and load strategy design and implementation; coordinates new data development ensuring consistency and integration with existing data warehouse structure; reviews requests for data and data usage, researches data sources for new and better data feeds; participates in continuous improvement efforts in enhancing performance and providing increased functionality; assists with the development of screens and

queries; tests designed applications; assists with upgrades and maintenance of hardware and software; maintains current knowledge of relevant hardware and software applications as assigned; participates in special projects as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-041H Database Architect

Minimum/General Experience: Requires at least three years' directly related experience in the design, maintenance, and coding of Health IT databases. Also requires knowledge of the principles, methods, and techniques used in all phases of database development, coding, and design, including business analysis, event modeling, logical and physical database design, data access analysis and design, DBMS optimization, archive and recovery strategy, load strategy design and implementation, security, and change management

Functional Responsibility: Designs, maintains, enhances, and codes relational databases; analyzes and determines information needs and elements, data relationships and attributes, data flow and storage requirements, and data output and reporting capabilities; develops data modeling and participates in data acquisition and access analysis and design, and archive, recovery, and load strategy design and implementation; coordinates new data development ensuring consistency and integration with existing data warehouse structure; reviews requests for data and data usage, researches data sources for new and better data feeds; participates in continuous improvement efforts in enhancing performance and providing increased functionality; designs data structures to accommodate database production, storage, maintenance, and accessibility; develops screens and queries; tests designed applications; performs upgrades and maintenance of hardware and software; provides technical support and guidance to users; maintains current knowledge of relevant hardware and software applications as assigned; may serve as team or technical task lead; participates in special projects as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	7 years
AA/AS	5 years
MA/MS	1 years
Doctorate Degree/Ph.D.	0 years

ANT-042H SR Database Architect

Minimum/General Experience: Requires at least five years' directly related experience in the design, maintenance, and coding of Health IT databases. Also requires advanced knowledge of the principles, methods, and techniques used in all phases of database development, coding, and design, including business analysis, event modeling, logical and physical database design, data access analysis and design, DBMS optimization, archive and recovery strategy, load strategy design and implementation, security, and change management.

Functional Responsibility: Designs, maintains, enhances, and codes relational databases; analyzes and determines information needs and elements, data relationships and attributes, data flow and storage requirements, and data output and reporting capabilities; develops data modeling and is responsible for data acquisition and access analysis and design, and archive, recovery, and load strategy design and implementation; coordinates new data development ensuring consistency and integration with existing data warehouse structure; reviews business requests for data and data usage, researches data sources for new and better data feeds; participates in continuous improvement efforts in enhancing performance and providing increased functionality; designs data structures to accommodate database production, storage, maintenance, and accessibility; develops screens and queries; tests designed applications; may perform upgrades and maintenance of hardware and software; provides technical support and guidance to users; maintains current knowledge of relevant hardware and software applications as assigned; may serve as team or technical task lead and provide guidance and training to lower-level staff; participates in special projects as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-045H Computer Programmer/Analyst

Minimum/General Experience: Must have at least three years' experience in the Health IT computer programming field. Depending on the job assignment, knowledge of or certification in specific applications or processes may be required in the following areas: Web technologies, design technologies, specific programming languages, authoring languages and systems, and Modeling and Simulation (M&S) technologies, processes, and tools.

Functional Responsibility: Generates new code and corrects, converts, and/or modifies existing code to meet documented standards; designs new and/or redesigns and maintains existing software products; identifies client needs and requirements based on evaluation of client documentation and interviews; performs data and technical analysis; performs a variety of testing procedures on assigned products, analyzes test results, and corrects problems; prepares test scripts and descriptions and examines to locate necessary modifications; analyzes and modifies program specifications and documentation to support contract requirements; may design and develop computer-based and/or multimedia courseware for customer training initiatives utilizing appropriate authoring languages, systems, animation and graphics software; provides customer support to clients and troubleshoots problems.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	7 years
AA/AS	5 years
MA/MS	1 years
Doctorate Degree/Ph.D.	0 years

ANT-046H Staff Computer Programmer/Analyst

Minimum/General Experience: Requires at least four years' experience in the Health IT computer programming field. Depending on the job assignment, knowledge of or certification in specific applications or processes may be required in the following areas: Web technologies, design technologies, specific programming languages, authoring languages and systems, and Modeling and Simulation (M&S) technologies, processes, and tools.

Functional Responsibility: Programs, designs, analyzes, codes, implements, and tests software applications and modules in various languages, including business software systems and applications; provides network support including providing technical solutions and training; writes, modifies, and maintains software documentation and specifications; performs integration testing and support of various computer operating and/or network systems; installs, configures, and troubleshoots various hardware and software platforms; analyzes and documents client needs and requirements; may train other programmer/analysts; develops product documentation to describe system requirements and use; may design and develop computer-based and/or multimedia courseware for customer training initiatives utilizing appropriate authoring languages, systems, animation and graphics software; participates in meeting; prepares reports on analyses, findings, and project progress; performs technical research on emerging technologies to determine impacts on application execution.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	8 years
AA/AS	6 years
MA/MS	2 years
Doctorate Degree/Ph.D.	1 years

ANT-047H SR Computer Programmer/Analyst

Minimum/General Experience: Requires at least five years' experience in the Health IT computer programming field. Depending on the job assignment, knowledge of or certification in specific applications or processes may be required in the following areas: Web technologies, design technologies, specific programming languages, authoring languages and systems, and Modeling and Simulation (M&S) technologies, processes, and tools.

Functional Responsibility: Participates in all phases of software development, including system design, analysis, architecture, and engineering; programs, designs, analyzes, codes, implements, and tests software applications, modules, and databases in various languages, including those associated with scientific, technical, or engineering problems; performs process analyses in order to recommend improvements; performs system, network, and/or database administration, analysis, design, implementation, and testing; analyzes and documents client needs and requirements; provides technical support including providing technical solutions and training; writes, modifies, and maintains software documentation and specifications;
Performs a variety of testing for computer operating and/or network systems; performs data and technical analysis and information engineering; installs, configures, and troubleshoots various hardware and software platforms; may design and develop computer-based and/or multimedia courseware for customer training initiatives utilizing appropriate authoring languages, systems, animation and graphics software; participates in meetings and design reviews; prepares reports on analyses, findings, and project progress; performs technical research on emerging technologies to determine impacts on application execution; may serve as a technical task or team lead.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-048H Principal Computer Programmer/Analyst

Minimum/General Experience: Requires at least eight years' experience in the Health IT computer programming field. Depending on the job assignment, knowledge of or certification in specific applications or processes may be required in the following areas: Web technologies, design technologies, specific programming languages, authoring languages and systems, and Modeling and Simulation (M&S) technologies, processes, and tools.

Functional Responsibility: Participates in all phases of software development, including system design, analysis, architecture, and engineering; plans and directs the development of major programming projects and the installation of systems; programs, designs, analyzes, codes, implements, and tests software applications, modules, and databases in various languages, including those associated with scientific, technical, or engineering problems; performs process analyses in order to recommend improvements; performs system, network, and/or database administration, analysis, design, implementation, and testing; analyzes and documents client needs and requirements; provides technical support including providing technical solutions and training; writes, modifies, and maintains software documentation and specifications; performs a variety of testing for computer operating and/or network systems; performs data and technical analysis and information engineering; installs, configures, and troubleshoots various hardware and software platforms; may design and develop computer-based and/or multimedia courseware for customer training initiatives utilizing appropriate authoring languages, systems, animation and graphics software; participates in meetings and design reviews; prepares reports on analyses, findings, and project progress; may supervise and direct the work of lower-level analysts; performs technical research on emerging technologies to determine impacts on application execution; may serve as a technical task or team lead.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-049H Computer Systems Programmer

Minimum/General Experience: Must have at least five years' experience, of which at least three years must be specialized in Health IT arena. Specialized experience includes: systems analysis and programming. Must demonstrate the ability to work independently or under only general direction.

Functional Responsibility: Create and/or maintain operating systems, communications software, database packages, compilers, assemblers, and utility programs. Modify existing software, as well as create special-purpose software to ensure efficiency and integrity between systems and applications. Assist in the development, testing and maintenance of disaster recovery procedures.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-050H Web Designer

Minimum/General Experience: Requires at least two years experience in Health IT Web design. Also requires knowledge of the principles, methods, and techniques used in Web design.

Functional Responsibility: Designs and builds Web pages using a variety of graphics software applications, techniques, and tools; designs and develops user-interface features, site animation, and special-effects elements; designs the Website to support the customer's strategies and goals relative to external communications; contributes to the Web design group's efforts to specify, improve, and implement the look, feel, and function of online projects; interfaces directly with customers, users, graphic artists, and Web software developers.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-051H Web Developer

Minimum/General Experience: Requires at least four years' experience in Health IT software development, installation, and modification in an online environment.

Functional Responsibility: Provides application development and technical support for internal and external Webs; develops Web pages and applications for customers; collaborates with graphic artists to develop Web page graphics that support interactive, marketing-focused content; provides technical consultation in new systems development, new package evaluations and enhancements of existing systems; prepares functional specifications from which programs will be written, then designs, codes, tests, debugs and documents programs; participates in the technical design, development, testing,

implementation and maintenance of Web site enhancements; plans, schedules and conducts systems tests, monitors test results, and takes appropriate corrective action; may prepare technical user guides.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	8 years
AA/AS	6 years
MA/MS	2 years
Doctorate Degree/Ph.D.	1 years

ANT-052H SR Web Developer

Minimum/General Experience: Requires at least eight years' experience, of which at least two years must include technical leadership experience and at least four years' experience in Health IT software development, installation, and modification in an online environment.
Functional Responsibility: Designs and develops well-integrated and cost-effective solutions for internal and external Webs; works closely with client project managers and technical leaders to understand customers' business objectives and systems requirements; designs and develops Web infrastructures; designs and implements an intranet strategy for authorization of users to access controlled components; designs relational databases to perform well logically and physically for decision support; coordinates enhancements and maintenance of Web systems and sites; provides recommendations for server operating systems, hardware requirements and encryption standards for communications to and from secure servers; provides technical advice and expertise to Webmasters and Web developers in the installation, acceptance testing, and evaluation of newly released and beta software; may serve as a functional/technical team or task lead.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-053H Web Tech Administrator

Minimum/General Experience: Requires at least four years' experience in Health IT systems technology. Must have an understanding of federal information security/assurance policies, standards and regulations.

Functional Responsibility: Responsible for achieving overall technical integrity of organization's Website. Maintains and upgrades hardware and software including website technical architecture related to hardware and telecommunication connectivity. Administers e-mail, chat, and FTP and HTTP services. Communicates router configuration changes and troubleshoots system errors and bugs. Maintains servers, creates monitoring reports and logs, and ensures functionality of links. Monitors site for acceptable performance and user accessibility. Establishes backups and monitors site security.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	8 years
AA/AS	6 years
MA/MS	2 years
Doctorate Degree/Ph.D.	1 years

ANT-054H Web Content Manager

Minimum/General Experience: Requires at least two years' experience in Health IT production management, Web page design, Web design languages, and Web graphics types and standards.

Functional Responsibility: Responsible for developing and providing content that will motivate and entertain users so that they regularly access the Website and utilize it as a major source for information and decision making. Responsible for managing/performing Website editorial activities including gathering and researching information that enhances the value of the site. Locates, negotiates, and pursues content. Seeks out customers to gather feedback for Website improvement and enhancements.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-055H Web Security Administrator

Minimum/General Experience: Requires at least four years' experience in Health IT software development, installation, and modification in an online environment. Requires experience in security administration, evaluation of security/Information Assurance (IA) product capabilities, assessment and policy development. Must have a solid understanding of federal information security/assurance policies, standards and regulations.

Functional Responsibility: Performs all procedures necessary to ensure the safety of the organization's Website and transactions across the Internet. Applies Internet Firewall technologies to maintain security.

Ensure that the user community understands and adheres to necessary procedures to maintain security. Works under limited supervision.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	8 years
AA/AS	6 years
MA/MS	2 years
Doctorate Degree/Ph.D.	1 years

ANT-057H Computer Systems Analyst

Minimum/General Experience: Must have at least three years of computer experience in assignments of a Health IT technical nature working under close supervision and direction. Must have at least one year experience in analyzing and programming applications on large-scale on mid-tier computers (or LAN-based) with a minimum of one year of design and programming of moderately complex ADP systems.

Functional Responsibility: Develops requirements for information systems form a project's inception to conclusion. Develops required specifications for simple to moderately complex systems. Assists senior computer systems analyst in preparing input and test data for the proposed system.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	7 years
AA/AS	5 years
MA/MS	1 years
Doctorate Degree/Ph.D.	0 years

ANT-058H Staff Computer Systems Analyst

Minimum/General Experience: Must have five years of computer experience in Health IT information systems design and management. At least three years of experience in analysis and design of business applications for complex large-scale or mid-tier computer systems, or LAN-based systems.

Functional Responsibility: Analyzes and develops computer software processing a wide range of capabilities, including numerous engineering, business, and records management duties. Develops plans for systems from project inception to conclusion. Analyzes the problem and the information to be processed. Defines the problem, and develops system requirements and program specifications from which programmers prepare detailed flow charts, programs, and tests. Coordinates closely with programmers to ensure proper implementation of program and system specifications. Develops, in conjunction with functional users, system alternative solutions.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-059H SR Computer Systems Analyst

Minimum/General Experience: Must have eight years of computer experience working independently or under general direction on complex Health IT application problems involving all phases of systems analysis. At least five years' experience in analysis and design of business applications for complex, large-scale or mid-tier computer systems, or LAN-based systems.

Functional Responsibility: Analyzes and evaluates user needs and identifies resources required for each task to determine functional requirements; conceptualizes, develops, and implements complex systems designed to meet client requirements; defines systems objectives and prepares system design specifications to meet requirements; designs, develops, implements, and tests new systems or modifies existing systems that meet the user's needs; codes applications and tests to software requirements; writes or updates software specifications; analyzes procedures and systems to refine their formulation and convert to programmable formats; analyzes data requirements to determine data source and destinations; coordinates with client to define problem, determine data availability, report requirements, and resolve system design problems; creates logical data models based on functional requirements; performs quality review of specifications for internal and external delivery; troubleshoots and provides technical support and solutions to users; develops analytical tools for use in the design and redesign of programs as assigned; may serve as a technical team or task lead.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-060H Principal Computer Systems Analyst

Minimum/General Experience: Must have ten years' of computer experience working independently or under general direction on complex Health IT application problems involving all phases of systems analysis. At least five years' experience in analysis and design of business applications for complex, large-scale or mid-tier computer systems, or LAN-based systems.

Functional Responsibility: Analyzes and evaluates user needs and identifies resources required for each task to determine functional requirements; conceptualizes, develops, and implements complex systems designed to meet client requirements; defines systems objectives and prepares system design specifications to meet requirements; designs, develops, implements, and tests new systems or modifies existing systems that meet the user's needs; develops and executes test plans; codes applications and tests to software requirements; writes or updates software specifications as necessary; writes technical project documentation including detailed design documents and program specifications; analyzes procedures and systems to refine their formulation and convert to programmable formats; analyzes data requirements to determine data source and destinations; coordinates with client to define problem, determine data availability, report requirements, and resolve system design problems; creates logical data models based on functional requirements; performs quality review of specifications for internal and external delivery; troubleshoots and provides technical support and solutions to users; develops analytical tools for use in the design and redesign of programs as assigned; may serve as a technical task or team lead.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	14 years
AA/AS	12 years
MA/MS	8 years
Doctorate Degree/Ph.D.	7 years

ANT-061H Legacy System Analyst

Minimum/General Experience: Expert (five or more years of experience) in a specific Health IT "legacy system(s)" functionality to include knowledge of designated "legacy" hardware, operating systems, capacities, configurations, applications programs, preference programming languages, and administration, operations, and maintenance characteristics of the designated "legacy" system.

Functional Responsibility: Analyze requirements for maintaining, modifying or converting unique application systems that are deemed "legacy" systems. Provide guidance and technical/functional advice to programmers. Provide unique knowledge of the history of changes to the "legacy" applications. Develop plans to migrate "legacy" systems to new technologies and/or new functionality. Analyze and document "legacy" system functionality to identify mandatory requirements to be fulfilled by migration system candidates. May also participate in the analysis and evaluation of migration system candidates. May also participate in designing, developing and implementing changes to "legacy" systems to accommodate such requirements as interim interfaces to migration systems and/or conversion to migration systems.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	5 years
AA/AS	3 years
BA/BS	1 year
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-062H JR Functional Analyst/Specialist

Minimum/General Experience: Requires at least one year directly related experience in a specific Health IT functional area.

Functional Responsibility: Analyzes user needs and performs research and functional analysis on a variety of projects; works under direct supervision; does related work as required.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	5 years
AA/AS	3 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-063H Functional Analyst/Specialist

Minimum/General Experience: This position requires a minimum of five years' experience, of which at least three years must be Health IT specialized. Specialized experience includes: developing functional requirements for complex integrated systems. Must demonstrate the ability to work independently or under only general direction.

Functional Responsibility: Analyzes user needs to determine functional requirements. Performs functional allocation to identify required tasks and their interrelationships. Identifies resources required for each task.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**

HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-064H SR Functional Analyst/Specialist

Minimum/General Experience: This position requires a minimum of seven years' experience, of which at least six years must be Health IT specialized. Specialized experience includes: developing functional requirements for complex integrated systems. Must demonstrate the ability to work independently or under only general direction.

Functional Responsibility: Analyze user needs to determine functional requirements. Performs functional allocation to identify required tasks and their interrelationships. Identifies resources required for each task. Provides daily supervision and direction to support staff.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
MA/MS	5 years
Doctorate Degree/Ph.D.	4 years

ANT-065H Principal Functional Analyst/Specialist

Minimum/General Experience: This position requires at least eight years' experience, of which at least six years must be Health IT specialized. Specialized experience includes developing functional requirements for complex integrated systems. Requires advanced technical knowledge of the principles, methods, techniques, work processes, and applicable regulations in assigned subject-matter area(s).

Functional Responsibility: Analyzes user needs and performs research and functional analysis on a variety of projects at a highly technical level; may have supervisory responsibility; serves as technical advisor to clients in assigned subject areas' recommends functional changes, and identifies areas for further investigation; generates recommendations in the form of technical briefings, reports, and other major documents provided to senior level client personnel; may serve as a technical team or task lead.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	14 years
AA/AS	12 years
BA/BS	10 years
Doctorate Degree/Ph.D.	7 years

ANT-066H SR Principal Functional Analyst/Specialist

Minimum/General Experience: This position requires at least ten years' experience, of which at least six years must be Health IT specialized. Specialized experience includes developing functional requirements for complex integrated systems. Requires advanced technical knowledge of the principles, methods, techniques, work processes, and applicable regulations in assigned subject-matter area(s).

Functional Responsibility: Analyzes user needs and performs research and functional analysis on a variety of projects at a highly technical level; may have supervisory responsibility; serves as technical advisor to clients in assigned subject areas; recommends functional changes, and identifies areas for further investigation; generates recommendations in the form of technical briefings, reports, and other major documents provided to senior level client personnel; serves as primary client liaison and coordinates with sub-contractors, government personnel, and technical experts; serves as technical team or task lead.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	16 years
AA/AS	14 years
BA/BS	12 years
Doctorate Degree/Ph.D.	9 years

ANT-067H Data Management Specialist

Minimum/General Experience: Must have at least six years' experience, of which at least three years must be Health IT specialized. Specialized experience includes: demonstrated experience using current DBMS technologies, application design utilizing database management systems and experience with DBMS internals. General experience includes increasing responsibilities in DBMS systems analysis and programming. Must demonstrate the ability to work independently or under only general direction.

Functional Responsibility: Provides highly technical expertise in the use of DBMS. Evaluates and recommends available DBMS products to support validated user requirements. Defines file organization, indexing methods, and security procedures for specific user applications.

Minimum Education: BA/BS

Approved Substitutions

Education	Experience
HS	10 years
AA/AS	8 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-068H Data Administrator

Minimum/General Experience: Must have at least six years' of general experience in Health IT systems analysis or programming including four years of specialized experience in DBMS.

Functional Responsibility: Provides highly technical expertise and guidance in the design, implementation, operation and maintenance of database management systems (DBMS). Evaluates and recommends available DBMS products after matching requirements with system capabilities. Determines file organization, indexing methods, and security procedures for specific applications. Controls the design and use of databases. Controls the global view of databases, controls the access to the databases, assures the safekeeping of the databases (from accidental or intentional damage or loss), and monitors the use of databases. Must be capable of defining all required database administration policies, procedures, standards, and guidelines. Is an authority on the design of databases and the use of database management systems. Evaluates and recommends available DBMS products after matching requirements with system capabilities. Prepares and delivers presentations on DBMS concepts.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	10 years
AA/AS	8 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-069H Data Manager

Minimum/General Experience: Must have at least seven years' experience, of which at least five must be Health IT specialized. Specialized experience includes: demonstrated experience using current DBMS technologies, application design utilizing various database management systems and experience with DBMS internals. General experience includes increasing responsibilities in DBMS systems analysis and programming. Must demonstrate the ability to work independently or under only general direction.

Functional Responsibility: Manages the development of database projects. Plans and budgets staff and database resources. When necessary, reallocates resources to maximize benefits. Prepares and delivers presentations on Database Management Systems (DBMS) concepts. Provides daily supervision and direction to support staff.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
MA/MS	5 years
Doctorate Degree/Ph.D.	4 years

ANT-070H Computer Operations Manager

Minimum/General Experience: Must have at least six years' experience, of which at least three years are Health IT specialized. Specialized experience includes: supervision and operations experience on a large-scale computer system, knowledge of hardware, software and operating systems. General experience includes operations experience on a large-scale computer system.

Functional Responsibility: Manages the work of computer operations personnel; identifies processing requirements and schedules job streams for computer runs; responsible for security and routing of input and output data, problem resolution and restart/recovery, interpreting technical documentation standards and preparation of documentation according to standards; interfaces with client and/or other government personnel; determines appropriate course of action in case of malfunction and confers with and directs staff as warranted.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	8 years
BA/BS	4 years
MA/MS	2 years
Doctorate Degree/Ph.D.	1 years

ANT-071H SR Computer Operations Manager

Minimum/General Experience: Must have at least eight years' experience, of which at least four years are Health IT specialized. Specialized experience includes: supervision and operations experience on a large-scale computer system, knowledge of hardware, software and operating systems. General experience includes operations experience on a large-scale computer system.

Functional Responsibility: Manages and directs the operations and support of the computer systems and peripheral equipment in large scale or multi-shift operations; supervises and directs the work of computer operations personnel; identifies processing requirements and schedules job streams for computer runs; responsible

for the security and routing of input and output data, problem isolation and restart/recovery, interpreting technical documentation standards and preparation of documentation according to standards, and interfacing with client and/or government personnel; determines appropriate course of action in case of malfunction and confers with and directs staff as warranted.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	10 years
AA/AS	8 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-076H Communications Engineer

Minimum/General Experience: Must have at least six years of general experience with Health IT telecommunications systems including three years of specialized experience.

Functional Responsibility: Provides technical support for telecommunications activities including planning, designing, installing, and maintaining large telecommunications networks. Develops, operates, and maintains voice, video, and/or data communications systems. Applies telecommunications engineering principles and theory to propose design and configuration alternatives. Evaluates existing communications systems to identify deficiencies and performance improvements. Consults with user personnel to ensure that problems have been properly identified and that the solution will meet the requirements. Analyzes system performance, usage and traffic flows, accesses and interfaces, transmission techniques, and protocols. Performs system analyses and feasibility studies concerning communications and communication networks. Prepares studies and gives presentations on communications concepts. Provides technical guidance to other personnel concerning data communications requirements. Participates in preparing specifications for acquiring commercially available data communications networks.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	10 years
AA/AS	8 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-077H SR Communications Engineer

Minimum/General Experience: Must have at least ten years of general experience with Health IT telecommunications systems including four years of specialized experience.

Functional Responsibility: Provides technical direction for telecommunications activities including planning, designing, installing, and maintaining large telecommunications networks. Develops, operates, and maintains voice, video, and/or data communications systems. Applies telecommunications engineering principles and theory to propose design and configuration alternatives. Evaluates existing communications systems to identify deficiencies and performance improvements. Consults with user personnel to ensure that problems have been properly identified and that the solution will meet the requirements. Analyzes system performance, usage and traffic flows, accesses and interfaces, transmission techniques, and protocols. Performs system analyses and feasibility studies concerning communications and communication networks. Prepares studies and gives presentations on communications concepts. Provides technical guidance to other personnel concerning data communications requirements. Participates in preparing functional specifications for acquiring commercially available data communications networks.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	14 years
AA/AS	12 years
MA/MS	8 years
Doctorate Degree/Ph.D.	7 years

ANT-078H JR Network Engineer

Minimum/General Experience: This position requires no experience and knowledge of the principles, methods, and techniques used in network administration and engineering plus knowledge of and ability to use relevant hardware, software and other equipment. Certification in specific applications may be required, depending on job assignment.

Functional Responsibility: Performs basic engineering work concerned with the analysis, planning, designing, evaluating, selecting, and upgrading of network systems; performs various tests and documents results; administers and maintains local and wide area networks; provides technical support and troubleshooting to users; configures systems to user environments; assists in telecommunications activities including planning, designing, installing, and maintaining large telecommunications networks; assists in the maintenance and operation of voice, video, and data communications systems; supports the acquisition of hardware and software as well as subcontractor services as needed.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	4 years
AA/AS	2 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-079H Network Engineer

Minimum/General Experience: Must have at least two 2 years' related Health IT network design/administration experience. Also requires knowledge of the principles, methods, and techniques used in network administration and engineering plus knowledge of and ability to use relevant hardware, software and other equipment. Certification in specific applications may be required, depending on job assignment

Functional Responsibility: Analyzes local and wide area network systems, including planning, designing, evaluating, selecting, and upgrading operating systems and protocol suites and configuring communication media with concentrators, bridges, and other devices; resolves interoperability problems to obtain operations across all platforms including email, file transfer, multimedia, teleconferencing, and the like; configures systems to user requirements; supports the acquisition of hardware and software as well as subcontractor services as needed; performs various tests and documents results; administers and maintains local and wide area networks; provides technical support and troubleshooting to users; plans network layout design; may administer network security.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-080H Staff Network Engineer

Minimum/General Experience: Must have at least 5 years' related Health IT network design/administration experience. Also requires knowledge of the principles, methods, and techniques used in network administration and engineering plus knowledge of and ability to use relevant hardware, software and other equipment. Certification in specific applications may be required, depending on job assignment

Functional Responsibility: Analyzes local and wide area network systems, including planning, designing, evaluating, selecting, and upgrading operating systems and protocol suites and configuring communication media with concentrators, bridges, and other devices; resolves interoperability problems to obtain operations across all platforms including email, file transfer, multimedia, teleconferencing, and the like; configures systems to user requirements; supports the acquisition of hardware and software as well as subcontractor services as needed; performs various tests and documents results; administers and maintains local and wide area networks; provides technical support and troubleshooting to users; plans network layout design; may administer network security; may perform database administration; may provide guidance and training to lower level personnel and serve as technical team or task lead.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-081H SR Network Engineer

Minimum/General Experience: Must have at least eight years' related Health IT network design/administration experience. Also must have advanced knowledge of the principles, methods, and techniques used in network administration and engineering plus advanced knowledge of and ability to use relevant hardware, software and other equipment is required.

Functional Responsibility: Analyzes local and wide area network systems, including planning, designing, evaluating, selecting, and upgrading operating systems and protocol suites and configuring communication media with concentrators, bridges, and other devices; resolves interoperability problems to obtain operations across all platforms including email, file transfer, multimedia, teleconferencing, and the like; configures systems to user requirements; supports the acquisition of hardware and software as well as subcontractor services as needed; performs various tests and documents results; administers and maintains local and wide area networks; provides technical support and troubleshooting to users; plans network layout design; may administer network security; may perform database administration; may supervise and direct the work of lower level personnel; may serve as technical team or task lead.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	14 years
AA/AS	12 years
BA/BS	10 years
Doctorate Degree/Ph.D.	7 years

ANT-082H Principal Network Engineer

Minimum/General Experience: Must have at least ten years' related Health IT network design/administration experience. Expert knowledge of the principles, methods, and techniques used in network administration and engineering plus expert knowledge of and ability to use relevant hardware, software and other equipment is required.

Functional Responsibility: Provides expert level analysis of local and wide area network systems, including planning, designing, evaluating, selecting, and upgrading operating systems and protocol suites and configuring communication media with concentrators, bridges, and other devices; resolves interoperability problems to obtain operations across all platforms including email, file transfer, multimedia, teleconferencing, and the like; configures systems to user requirements; supports the acquisition of hardware and software as well as subcontractor services as needed; directs various testing and the documentation of results; plans network layout design; may administer network security; may perform database administration; may supervise and direct the work of lower level personnel; serves as technical team or task lead.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	16 years
AA/AS	14 years
BA/BS	12 years
Doctorate Degree/Ph.D.	9 years

ANT-083H Network Administrator

Minimum/General Experience: Requires at least seven years' experience. Also requires knowledge of the principles, methods, and techniques used in Health IT network troubleshooting and support as well as knowledge of operating systems and applications and network management. Must have working knowledge of current technologies and products for Web services and security.

Functional Responsibility: Supports, installs, maintains, troubleshoots, and coordinates the usage of local and wide area networks (LAN and WAN), electronic mail, telecommunications, and PC based systems and related software; evaluates hardware and software, including peripheral, output, and telecommunications equipment; sets up and administers security procedures; troubleshoots problems; recommends and implements LAN policies and procedures and ensures adherence to security procedures; trains users on LAN operations and procedures.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
MA/MS	5 years
Doctorate Degree/Ph.D.	4 years

ANT-084H SR Network Administrator

Minimum/General Experience: Requires eight years' experience and knowledge of the principles, methods, and techniques used in Health IT network troubleshooting and support, operating systems and applications and network management. Must have working knowledge of current technologies and products for Web services and security.

Functional Responsibility: Responsible for the planning, design, acquisition, installation, and maintenance of LAN and WAN, electronic mail, telecommunications, and PC based systems and related software; evaluates hardware and software, including peripheral, output, and telecommunications equipment; sets up and administers security procedures; troubleshoots problems; establishes and implements LAN policies and their conformance; coordinates activities of LAN support personnel, providing guidance on common networking issues; assesses vendor products; manages network performance, troubleshoots problems, and maintains network security.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-088H Network/Computer Support Specialist

Minimum/General Experience: Must have at least three years directly related experience in Health IT network support. Requires advanced knowledge of the following: principles, methods, and techniques used in network troubleshooting and support; modems, data scopes, patch panels, concentrators, associated terminals, and network management software; Desk Top Operating Systems and Applications. Certification in one or more specific application(s) may be required, depending on job assignment.

Functional Responsibility Installs, configures, and upgrades computer hardware; provides end-user software troubleshooting and support; provides network

troubleshooting and support; diagnoses hardware, software and operator problems and corrects them; analyzes IT infrastructure processes and makes recommendations for improvement; involved in IT infrastructure planning; recommends Business Process improvements; leads deployment activities; may provide end-user training; involved in the development of larger Business Applications and Exchange, Web Applications, and Virus Software implementation; may supervise Network/Computer Support Technicians.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	7 years
AA/AS	5 years
MA/MS	1 years
Doctorate Degree/Ph.D.	0 years

ANT-089H Computer System/Network Integration Engineer

Minimum/General Experience: Received certification level training in proprietary product network operating system or integration tools and at least one year experience in Health IT computer system/network engineering and/or technical subject specialization, or; 4 or more years experience in computer system/network engineer and/or technical subject specialization. Two more years experience within a specific field of technology related to computer systems integration/network integration administration or security and/or a specific technical subject specialization.

Functional Responsibility: Performs system and network analysis, design and administration. Designs computer and communications architectures, provides timely technical support, and designs hardware/software solutions for communications architectures.

ANT-092H SR Telecommunications Analyst

Minimum/General Experience: Most have at least three years' directly related experience in Health IT telecommunications systems design and support. Must also have advanced knowledge of the fundamental concepts used in telecommunications systems administration and support as well as relevant hardware and software systems.

Functional Responsibility: Evaluates, designs, and maintains existing or proposed telecommunications systems; analyzes the telecommunications needs of the user and recommends solutions; designs, develops, and tests telecommunications software solutions; prepares detailed specifications and flow charts for implementation of new internal programs or modification to vendor software; coordinates installation of equipment; monitors the operations of telecommunications systems and services of vendors; provides end user training of telecommunications features and functionality; may provide guidance and technical training to lower level analysts.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	5 years
BA/BS	1 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-093H Communications Network Manager

Minimum/General Experience: Must have at least six years' experience, of which at least three years are specialized. Specialized experience includes: supervising the operation and maintenance of Health IT communications network systems. General experience includes all aspects of communications networks.

Functional Responsibility: Schedules conversions and cutovers. Oversees network control center. Supervises maintenance of systems. Coordinates with all responsible users and sites. Supervises staff.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	10 years
AA/AS	8 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-102H Hardware Specialist

Minimum/General Experience: Must have at least five years' progressive experience in systems analysis with three years' intensive and progressive specific experience in the specialty.

Functional Responsibility: Determines feasible hardware alternatives in client server environments. Reviews computer systems in terms of capabilities and makes recommendations for improved utilization. Prepares or directs preparation of reports concerning hardware. Prepares or participates in preparing functional requirements and specifications for hardware acquisitions.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years

AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-103H Quality Assurance/IV&V Analyst

Minimum/General Experience: Must have at least two years' related experience in Health IT quality assurance and/or software engineering. Must also have experience with Independent Validation and Verification (IV&V) and system configuration.

Functional Responsibility: Assists in the review and evaluation of software products and systems to ensure adherence to customer quality standards; develops software/systems testing procedures and conducts tests; analyzes and documents IV&V issues; presents IV&V results; works under general supervision.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-104H Quality Assurance/IV&V Specialist

Minimum/General Experience: Must have at least four years' experience of which two years must be specialized. Specialized experience includes: Health IT Configuration Management, IV&V, software testing and integration, software metrics and their application to software quality assessment. General experience includes increasing responsibilities in quality assurance, quality control and IV&V.

Functional Responsibility: Assists in the evaluation of software and associated documentation. Participates in formal and informal reviews to determine quality; presents IV&V results and troubleshoots technical problems; makes recommendations to improve overall quality.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	8 years
AA/AS	6 years
MA/MS	2 years
Doctorate Degree/Ph.D.	1 years

ANT-105H Quality Assurance/IV&V Manager

Minimum/General Experience: Must have at least seven years of Health IT engineering and/or system analysis and programming experience, including four years of quality assurance, IV&V or system configuration experience.

Functional Responsibility: Organizes and maintains all quality assurance and IV&V documentation required. Responsible for ensuring compliance with recognized standards and practices. Reviews all documentation for completeness, accuracy, and correctness. Supports the test and integration personnel as a witness to testing requirements; presents IV&V results and troubleshoots technical problems; makes recommendations to improve overall quality. Certifies that deliverables have met all quality requirements.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
MA/MS	5 years
Doctorate Degree/Ph.D.	4 years

ANT-108H Configuration Management Specialist

Minimum/General Experience: Must have five years of engineering and/or Health IT system analysis and programming experience, including two years of configuration management experience.

Functional Responsibility: Responsible for configuration management activities including product identification, change control, status accounting, operation of the program support library, and development and monitoring of equipment/system acceptance plans. Evaluates and selects configuration management tools and standards. Coordinates with users and systems development personnel on releases of both system-level software and applications software. Verifies the completeness and accuracy of release libraries before implementation and ensures that correct versions of programs are included in specified releases. Prepares configuration management plans and procedures. Responsible for configuration management of requirements, design, and code. Operates and manages program support library. Monitors library structure and procedures to assure system integrity, including procedures for collection, release, production, test, and emergency libraries and the movement/migration of components between libraries. Monitors end-item acceptance plans. Will supervise lower level personnel. Must have demonstrated capability for oral and written communications.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**

HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-109H SR Configuration Management Specialist

Minimum/General Experience: Must have at least seven years' directly related experience in Health IT configuration management and support. Must also have advanced knowledge of the principles, methods, and techniques used in configuration management and support as well as knowledge and familiarity with Configuration Management software support packages commonly utilized in project management. Must be able to supervise and direct the work of others and have the ability to serve as a technical team or task lead.

Functional Responsibility: Conducts periodic site inventory in order to create and maintain inventories of equipment, software, and/or systems; prepares, maintains and inventories associated technical drawings for assigned projects; researches data, and creates and maintains inventory and other databases for assigned projects; prepares configuration change requests and verifies, tracks, and documents configuration changes; performs logistic-related tasks like shipping/receiving, tracking, and disposal of equipment, software, and/or systems; coordinates equipment/software utilization among individual users; provides documentation support for assigned projects; performs quality assurance checks on drawings prepared by other configuration management specialists; may serve as a team or task lead; may supervise and direct the work of other configuration management specialists; provides training on configuration management processes, software, and/or systems.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
MA/MS	5 years
Doctorate Degree/Ph.D.	4 years

ANT-111H Training Specialist/Instructor

Minimum/General Experience: Must have four years' experience in Health IT information systems development, training, or related fields. Must have two years specialized experience. Specialized experience includes: experience in developing and providing IT and end-user training on computer hardware and application software. General experience includes information systems development, training, or related fields. Demonstrated ability to communicate orally and in writing.

Functional Responsibility: Conducts the research necessary to develop and revise training courses. Develops and revises these courses and prepares appropriate training catalogs. Prepares all instructor materials (course outline, background material, and training aids). Prepares all student materials (course manuals, workbooks, handouts, completion certificates, and course critique forms). Trains personnel by conducting formal classroom courses, workshops and seminars.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	8 years
AA/AS	6 years
MA/MS	2 years
Doctorate Degree/Ph.D.	1 years

ANT-112H SR Training Specialist/Instructor

Minimum/General Experience: Must have six years' experience in Health IT information systems development, training, or related fields, with at least three years experience developing and providing IT and end-user training on computer hardware and application software.

Functional Responsibility: Conducts the research necessary to develop and revise training courses and prepares appropriate training catalogs. Prepares all instructor materials (course outline, background material, and training aids). Prepares all student materials (course manuals, workbooks, handouts, completion certificates, and course critique forms). Trains personnel by conducting formal classroom courses, workshops, and seminars. Provides daily supervision and direction to staff.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	10 years
AA/AS	8 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-114H Training Specialist

Minimum/General Experience: Requires at least three years' directly related experience in the design and development of Health IT training programs. Also requires knowledge of the principles, methods, and techniques used in the design and development of computer-based training programs as well as relevant hardware/software and computer equipment as required.

Must be able to present training programs to users and serve as a technical team led.

Functional Responsibility: Designs training objectives; develops computer-based training programs for assigned software; designs courseware and structures training classes; creates lesson text; provides documentation for software training; designs program authoring systems; creates final version of training programs; presents training programs to users; designs program flowcharts; may serve as a team lead.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	5 years
BA/BS	1 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-115H SR Training Specialist

Minimum/General Experience: Requires at least seven years' directly related experience in the design, development, testing, and implementation of computer-based Health IT training programs. Also requires thorough knowledge of the principles, methods, and techniques used in the design, development, testing, and implementation of computer-based training programs; knowledge of relevant hardware/software and computer equipment as required. Must be able to present training programs and evaluate effectiveness of training and serve as a team or task lead.

Functional Responsibility: Defines training requirements and analyzes system software changes; develops computer-based training objectives and methodologies; coordinates with subject matter experts to design training strategy; designs courseware, including structuring training classes; creates lesson text; provides documentation for software training; tests training programs and edits for effectiveness, creates final version; designs program authoring systems; presents training programs to users, validates and evaluates training effectiveness; designs program flowcharts; may develop multi-media training as required; conducts research into new training, educational, and multimedia technologies; may serve as a team or task lead.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	9 years
BA/BS	5 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-116H Principal Training Specialist

Minimum/General Experience: Requires at lest ten years' related experience in Health IT instructional development. Also requires advanced knowledge of the principles, methods, and techniques used in technology-based training as well as the use and application of off-the-shelf tools and associated equipment and systems.

Functional Responsibility: Designs and develops instructional approaches and/or strategies to meet training requirements; conducts analysis of training requirements and media requirements; develops appropriate training objectives and test methods and designs instructionally valid training materials; ensures integrity of task analysis, training requirements, training hierarchies, instructional materials, and evaluation plans; designs and develops computer-based training, web-based training, electronic performance support systems and other technology-based learning solutions; develops flow diagrams and story boards; designs instructionally sound lessons in a variety of delivery media; interacts with customer and subject matter experts to ensure technical accuracy of instructional content. Also provides guidance and work leadership to lower-level personnel and may serve as technical team or task lead.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	12 years
BA/BS	8 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-119H Testing and Validation Specialist

Minimum/General Experience: Requires no experience and knowledge of the principles, methods, and techniques used in analysis and assessment as well as the use and application of related off-the-shelf tools.

Functional Responsibility: Designs and develops assessment instruments and/or strategies to meet training requirements; conducts analysis of training requirements (needs, job, task analysis); interviews subject matter experts or incumbents to collect information; develops relevant and measurable assessment criteria, standards, and methodologies; designs reliable and valid assessment materials; gathers data and compiles information into documents related to assessment.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	4 years
AA/AS	2 years

MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-121H Principal Testing and Validation Specialist

Minimum/General Experience: Requires at least five years' related experience in Health IT educational psychology, industrial/organizational psychology, testing, psychometrics, or instructional media/technology. Also requires advanced knowledge of the principles, methods, and techniques used in analysis and assessment as well as the use and application of related off-the-shelf tools. Must have the ability to provide work leadership and supervision to assigned staff.

Functional Responsibility: Designs and develops assessment instruments and/or strategies to meet training requirements; conducts analysis of training requirements (needs, job, task analysis); interviews subject matter experts or incumbents to collect information; develops relevant and measurable assessment criteria, standards, and methodologies; designs reliable and valid assessment materials; prepares reports and technical documentation related to assessment; works on complex analysis or test development projects. Serves as a technical team/task lead and may have supervisory responsibility.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
BA/BS	7 years
Doctorate Degree/Ph.D.	4 years

ANT-123H Instructional System Designer

Minimum/General Experience: Requires at least two years' related experience in Health IT instructional development. Also requires knowledge of the principles, methods, and techniques used in technology-based training as well as the use and application of off-the-shelf tools and associated equipment and systems.

Functional Responsibility: Designs and develops instructional approaches and/or strategies to meet training requirements; conducts analysis of training requirements and media requirements; develops appropriate training objectives and test methods and designs instructionally valid training materials; ensures integrity of task analysis, training requirements, training hierarchies, instructional materials, and evaluation plans; designs and develops computer based training, web-based training, electronic performance support systems and other technology-based learning solutions; develops flow diagrams and story boards; designs instructionally sound lessons in a variety of delivery media; interacts with customer and subject matter experts to ensure technical accuracy of instructional content.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-124H SR Instructional System Designer

Minimum/General Experience: Requires at least five years' related experience in Health IT instructional development as well as thorough knowledge of the principles, methods, and techniques used in technology-based training and use and application of off-the-shelf tools and associated equipment and systems.

Functional Responsibility: Designs and develops instructional approaches and/or strategies to meet training requirements; conducts analysis of training requirements and media requirements; develops appropriate training objectives and test methods and designs instructionally valid training materials; ensures integrity of task analysis, training requirements, training hierarchies, instructional materials, and evaluation plans; designs and develops computer based training, web-based training, electronic performance support systems and other technology-based learning solutions; develops flow diagrams and story boards; designs instructionally sound lessons in a variety of delivery media; interacts with customer and subject matter experts to ensure technical accuracy of instructional content; may provide guidance and work leadership to lower-level personnel.

Minimum Education: MA/MS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
BA/BS	7 years
Doctorate Degree/Ph.D.	4 years

ANT-128H Staff Graphics Design Specialist

Minimum/General Experience: Requires at least five years' directly related experience in graphics design. Also requires knowledge of the principles, methods, and techniques used in the preparation of graphics material and associated software and equipment. Requires experience using graphics software programs.

Functional Responsibility: Performs a wide variety of graphics/illustration activities to produce brochures,

briefings, displays, and other materials; involved in all aspects of graphics/illustration projects from conceptualization and development to final presentation; may act as a technical consultant on matters of design, composition and methods of presenting technical data; uses a broad range of graphics production software and equipment; exercises creative judgment and originality by translating needs into graphics capabilities; may participate in website design.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	7 years
BA/BS	3 years
MA/MS	1 years
Doctorate Degree/Ph.D.	0 years

ANT-129H SR Graphics Design Specialist

Minimum/General Experience: Requires at least eight years' directly related experience in graphics design. Knowledge of the principles, methods, and techniques used in the preparation of graphics materials as well as knowledge of the associated software and equipment and in-depth knowledge of graphics software programs.

Functional Responsibility: Performs high-level computer graphic design activities to produce brochures, briefings, displays, and other materials; involved in all aspects of graphics/illustration projects from conceptualization and development to final presentation; may act as a technical consultant on matters of design, composition and methods of presenting technical data; uses a broad range of graphics production software and equipment; exercises creative judgment and originality by translating needs into graphics capabilities; may participate in website design; provides technical training and guidance to lower-level graphics personnel and may act as a team or task lead.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	10 years
BA/BS	6 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-130H Principal Graphics Design Specialist

Minimum/General Experience: Requires at least nine years' directly related experience in graphics design. Also requires knowledge of the principles, methods, and techniques used in the preparation of graphics materials and associated software and equipment and an in-depth knowledge of graphics software programs. Requires the ability to supervise and direct the work of others.

Functional Responsibility: Provides full supervision and training for graphic design personnel, directing the production of graphics projects from design through final presentation; acts as a technical consultant on matters of design, composition and methods of presenting technical data; uses a broad range of graphics production software and equipment; exercises creative judgment and originality by translating needs into graphics capabilities; may participate in website design; acts as a team or task lead.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	11 years
BA/BS	7 years
MA/MS	5 years
Doctorate Degree/Ph.D.	4 years

ANT-133H Contract Administrator

Minimum/General Experience: Requires at least two years' related experience in Health IT contracts administration. Also requires thorough knowledge of the practices, procedures, and processes of contracts administration as well as relevant laws, regulations, terms, conditions, and policies governing assigned contracts.

Functional Responsibility: Performs all duties of contract administration, including negotiation, correspondence, documentation, certification, financial reporting, and product delivery; implements subcontract administration procedures; negotiates contract terms from proposal stage to project close-out in accordance with relevant regulations; prepares and submits proposals including pricing and scheduling details and coordination of requirements; prepares consulting agreements; modifies contract schedules and participates in vendor reseller agreement negotiations when required; ensures timely processing of technical reports and deliverables; collects data for clients as requested

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	6 years
AA/AS	4 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-134H SR Contract Administrator

Minimum/General Experience: Requires at least five years' related experience in Health IT contracts

administration. Also requires advanced knowledge of the practices, procedures, and processes of contracts administration as well as thorough knowledge of relevant laws, regulations, terms, conditions, and policies governing assigned contracts including Federal Acquisition Regulations (FAR) and labor law.

Functional Responsibility: Performs all duties of contract administration, including negotiation, correspondence, documentation, certification, financial reporting, and product delivery for complex contracts; implements subcontract administration procedures; negotiates contract terms from proposal stage to project close-out in accordance with relevant regulations; coordinates approval of negotiations, contracts, and subcontracts with appropriate management staff; provides advice and interpretation of contract requirements; reviews solicitation requests to ensure compliance with terms and conditions; prepares and submits cost proposals including pricing and scheduling details, coordination of requirements, and cost proposal risk assessment; prepares responses to certifications and representations; prepares consulting agreements; modifies contract schedules and participates in vendor reseller agreement negotiations when required; ensures timely processing of technical reports and deliverables; coordinates with program managers to ensure contract requirements are fulfilled; collects data for clients as requested; may provide work leadership to lower level contracts personnel.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-137H Program Management Specialist

Minimum/General Experience: Requires at least three years' related administrative Health IT experience. Also requires demonstrated effective organizational skills and knowledge of word processing, spreadsheet, and/or other pertinent software applications.

Functional Responsibility: Responsible for management, performance and completion of projects associated with a contract program; collects and evaluates data for monitoring development and life-cycle requirements of various programs and systems; creates program cost estimates to support program cost/schedule/technique audits or to generate budget submissions; manages program staff; prepares management plans, budgets and schedules; uses and develops CPM and PERT evaluation techniques; uses computer programs and models to track program data; maintains contact with customer to ensure conformance to customer requirements.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	7 years
AA/AS	5 years
MA/MS	1 years
Doctorate Degree/Ph.D.	0 years

ANT-138H SR Program Management Specialist

Minimum/General Experience: Requires at least six years' related administrative Health IT experience. Also requires demonstrated effective organizational skills and knowledge of word processing, spreadsheet, and/or other pertinent software applications.

Functional Responsibility: Responsible for management, performance and completion of significant projects associated with a contract program; collects and evaluates data for monitoring development and life-cycle requirements of various programs and systems; creates program cost estimates to support program cost/schedule/technique audits or to generate budget submissions; manages and coordinates projects of considerable scope and magnitude; manages program staff; oversees the development of design concepts and test criteria; prepares management plans, budgets and schedules; uses and develops CPM and PERT evaluation techniques; uses computer programs and models to track program data; maintains contact with customer to ensure conformance to customer requirements.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	10 years
AA/AS	8 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-139H Principal Program Management Specialist

Minimum/General Experience: Requires at least eight years' related administrative Health IT experience. Also requires demonstrated management and organizational skills and knowledge of word processing, spreadsheet, and/or other pertinent software applications.

Functional Responsibility: Responsible for management, performance and completion of major projects associated with a contract program; collects and evaluates data for monitoring development and life-cycle requirements of various programs and systems; creates program cost estimates to support program cost/schedule/technique audits or to generate budget submissions; manages and directs, with full authority, all phases of a program from

inception to completion; manages program staff; oversees the development of design concepts and test criteria; reviews project and program schedules and plans and reports on alternative courses of action and potential impacts; directs, prepares and coordinates proposal preparation, management plans, budgets and schedules; uses and develops CPM and PERT evaluation techniques; uses computer programs and models to track program data; maintains contact with customer to ensure conformance to customer requirements.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	12 years
AA/AS	10 years
MA/MS	6 years
Doctorate Degree/Ph.D.	5 years

ANT-148H SR Documentation Specialist

Minimum/General Experience: Requires at least eight years' directly related experience in the research, preparation, and writing of technical and marketing materials. Also requires thorough knowledge of the principles and practices of technical research, writing, and editing as well as word-processing, desk-top publishing, and web applications and computer equipment.

Functional Responsibility: Collects and organizes information required for preparation of user's manuals, training materials, installation guides, and reports at a complex level; researches and learns the assigned system; interviews key personnel; writes materials; performs detailed edits of contract deliverables, proposals, brochures, press releases, and other materials to ensure technical accuracy, consistency, and adherence to specified content and format; participates in the writing, design, and development of marketing brochures, advertisements, news releases, feature articles, conference programs and proceedings, public relations announcements, newsletters, and other materials; designs, develops, produces, maintains, and manages client web sites as assigned; rewrites technical materials and coordinates with technical personnel to ensure accuracy; compiles and collects information for the preparation of technical proposals;
Creates multi-media presentation materials, including slides; may participate in the coordination of and attend various conferences and meetings; may serve as a team lead.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	10 years
BA/BS	6 years
MA/MS	4 years
Doctorate Degree/Ph.D.	3 years

ANT-150H Technical Editor

Minimum/General Experience: Must have at least five years' directly related experience in the research and preparation of technical materials. Also requires knowledge of the principles and practices of technical research, writing, and editing, as well as word-processing and desktop publishing applications and computer equipment as required.

Functional Responsibility: Prepares and edits a wide variety of complex technical materials for publication, including user's manuals, training materials, installation guides, proposals, and reports; reviews, researches, and edits information for preparation of contract deliverables; provides support to the creation of proposals and multi-media presentation materials, including slides; responsible for the coordination of multiple aspects of document publication; participates in the design and development of marketing brochures, conference programs and proceedings, public relations announcements, and other materials when requested; may supervise and direct the work of word processing, graphics and/or technical writing staff; coordinates and attends various conferences and meetings; plans budgets, schedules and priority of work for publications projects.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

HEALTH IT PROFESSIONAL SERVICES - RATES
Service Rates Applicable for SIN 54151HEAL, Health IT Professional Services

Cat #	Category Name	Contract Year 5 GSA Price with IFF (11/21/18 to 11/20/19)	Contract Year 6 GSA Price with IFF (11/21/19 to 11/20/20)	Contract Year 7 GSA Price with IFF (11/21/20 to 11/20/21)	Contract Year 8 GSA Price with IFF (11/21/21 to 11/20/22)	Contract Year 9 GSA Price with IFF (11/21/22 to 11/20/23)	Contract Year 10 GSA Price with IFF (11/21/23 to 11/20/24)
ANT-001H	Technical Expert 5	$ 102.75	$ 104.94	$ 107.19	$ 109.48	$ 111.83	$ 114.22
ANT-002H	Technical Expert 4	$ 116.60	$ 119.09	$ 121.64	$ 124.24	$ 126.90	$ 129.62
ANT-003H	Technical Expert 3	$ 168.37	$ 171.97	$ 175.65	$ 179.41	$ 183.25	$ 187.17
ANT-004H	Technical Expert 2	$ 206.61	$ 211.03	$ 215.54	$ 220.16	$ 224.87	$ 229.68
ANT-005H	Technical Expert 1	$ 304.54	$ 311.06	$ 317.72	$ 324.52	$ 331.46	$ 338.56
ANT-006H	Project Manager/Task Lead	$ 124.61	$ 127.28	$ 130.00	$ 132.79	$ 135.63	$ 138.53
ANT-007H	Program Manager	$ 136.72	$ 139.64	$ 142.63	$ 145.68	$ 148.80	$ 151.98
ANT-008H	Sr. Program Manager	$ 167.36	$ 170.94	$ 174.60	$ 178.34	$ 182.15	$ 186.05
ANT-009H	Proprietary Prod Application Developer	$ 120.25	$ 122.82	$ 125.45	$ 128.13	$ 130.88	$ 133.68
ANT-010H	Proprietary Prod Application Designer	$ 120.25	$ 122.82	$ 125.45	$ 128.13	$ 130.88	$ 133.68
ANT-011H	Proprietary Prod Database Admin	$ 115.85	$ 118.33	$ 120.86	$ 123.45	$ 126.09	$ 128.79
ANT-012H	Proprietary Prod System Architect	$ 117.42	$ 119.93	$ 122.50	$ 125.12	$ 127.80	$ 130.53
ANT-013H	Business Process Reengineering Analyst	$ 99.37	$ 101.49	$ 103.67	$ 105.88	$ 108.15	$ 110.46
ANT-015H	Scientist	$ 89.51	$ 91.42	$ 93.38	$ 95.38	$ 97.42	$ 99.50
ANT-016H	Staff Scientist	$ 114.70	$ 117.15	$ 119.66	$ 122.22	$ 124.83	$ 127.50
ANT-017H	Sr. Scientist	$ 137.49	$ 140.44	$ 143.44	$ 146.51	$ 149.65	$ 152.85
ANT-018H	Principal Scientist	$ 168.23	$ 171.83	$ 175.51	$ 179.26	$ 183.10	$ 187.02
ANT-019H	Sr. Principal Scientist	$ 195.16	$ 199.33	$ 203.60	$ 207.96	$ 212.41	$ 216.95
ANT-023H	Jr. Systems Engineer	$ 76.89	$ 78.54	$ 80.22	$ 81.93	$ 83.69	$ 85.48
ANT-024H	Systems Engineer	$ 93.49	$ 95.49	$ 97.53	$ 99.62	$ 101.75	$ 103.93
ANT-025H	Staff Systems Engineer	$ 115.17	$ 117.64	$ 120.16	$ 122.73	$ 125.35	$ 128.04
ANT-026H	Sr. Systems Engineer	$ 122.43	$ 125.05	$ 127.73	$ 130.46	$ 133.25	$ 136.10
ANT-027H	Principal Systems Engineer	$ 128.88	$ 131.64	$ 134.46	$ 137.34	$ 140.28	$ 143.28
ANT-028H	Sr. Principal Systems Engineer	$ 172.79	$ 176.49	$ 180.27	$ 184.12	$ 188.06	$ 192.09
ANT-029H	Information Engineer	$ 117.42	$ 119.93	$ 122.50	$ 125.12	$ 127.80	$ 130.53
ANT-030H	Sr. Information Engineer	$ 129.59	$ 132.36	$ 135.20	$ 138.09	$ 141.04	$ 144.06
ANT-031H	Principal Information Engineer	$ 153.77	$ 157.06	$ 160.42	$ 163.86	$ 167.36	$ 170.94
ANT-032H	Jr. Software Engineer	$ 74.47	$ 76.06	$ 77.69	$ 79.35	$ 81.05	$ 82.79
ANT-033H	Software Engineer	$ 87.46	$ 89.33	$ 91.24	$ 93.20	$ 95.19	$ 97.23
ANT-034H	Staff Software Engineer	$ 98.56	$ 100.67	$ 102.83	$ 105.03	$ 107.28	$ 109.57
ANT-035H	Sr. Software Engineer	$ 123.04	$ 125.67	$ 128.36	$ 131.11	$ 133.91	$ 136.78
ANT-036H	Principal Software Engineer	$ 172.48	$ 176.17	$ 179.94	$ 183.79	$ 187.73	$ 191.74
ANT-037H	Software Architect	$ 161.09	$ 164.54	$ 168.06	$ 171.66	$ 175.33	$ 179.08
ANT-038H	Computer Security Specialist	$ 98.07	$ 100.17	$ 102.32	$ 104.51	$ 106.74	$ 109.03
ANT-039H	Sr. Computer Security Specialist	$ 138.02	$ 140.97	$ 143.99	$ 147.07	$ 150.22	$ 153.43
ANT-040H	Jr. Database Architect	$ 78.59	$ 80.27	$ 81.99	$ 83.74	$ 85.53	$ 87.36
ANT-041H	Database Architect	$ 87.36	$ 89.22	$ 91.13	$ 93.08	$ 95.08	$ 97.11
ANT-042H	Sr. Database Architect	$ 110.47	$ 112.83	$ 115.25	$ 117.72	$ 120.23	$ 122.81
ANT-045H	Computer Programmer/Analyst	$ 78.71	$ 80.39	$ 82.11	$ 83.87	$ 85.66	$ 87.50

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ANT-046H	Staff Computer Programmer/Analyst	$ 110.69	$ 113.06	$ 115.48	$ 117.95	$ 120.47	$ 123.05
ANT-047H	Sr. Computer Programmer/Analyst	$ 114.30	$ 116.75	$ 119.25	$ 121.80	$ 124.41	$ 127.07
ANT-048H	Principal Computer Programmer/Analyst	$ 134.29	$ 137.17	$ 140.10	$ 143.10	$ 146.16	$ 149.29
ANT-049H	Computer Systems Programmer	$ 106.10	$ 108.37	$ 110.69	$ 113.06	$ 115.47	$ 117.95
ANT-050H	Web Designer	$ 77.77	$ 79.44	$ 81.14	$ 82.87	$ 84.64	$ 86.46
ANT-051H	Web Developer	$ 90.55	$ 92.48	$ 94.46	$ 96.48	$ 98.55	$ 100.66
ANT-052H	Sr. Web Developer	$ 123.30	$ 125.94	$ 128.63	$ 131.39	$ 134.20	$ 137.07
ANT-053H	Web Tech Administrator	$ 89.15	$ 91.05	$ 93.00	$ 94.99	$ 97.02	$ 99.10
ANT-054H	Web Content Manager	$ 87.28	$ 89.14	$ 91.05	$ 93.00	$ 94.99	$ 97.02
ANT-055H	Web Security Administrator	$ 87.44	$ 89.31	$ 91.22	$ 93.17	$ 95.17	$ 97.20
ANT-057H	Computer Systems Analyst	$ 87.85	$ 89.73	$ 91.65	$ 93.61	$ 95.62	$ 97.66
ANT-058H	Staff Computer Systems Analyst	$ 102.80	$ 105.00	$ 107.25	$ 109.54	$ 111.89	$ 114.28
ANT-059H	Sr. Computer Systems Analyst	$ 117.54	$ 120.05	$ 122.62	$ 125.24	$ 127.92	$ 130.66
ANT-060H	Principal Computer Systems Analyst	$ 142.03	$ 145.07	$ 148.17	$ 151.34	$ 154.58	$ 157.89
ANT-061H	Legacy Systems Analyst	$ 116.50	$ 118.99	$ 121.54	$ 124.14	$ 126.80	$ 129.51
ANT-062H	Jr. Functional Analyst/Specialist	$ 65.31	$ 66.71	$ 68.14	$ 69.59	$ 71.08	$ 72.60
ANT-063H	Functional Analyst/Specialist	$ 77.25	$ 78.90	$ 80.59	$ 82.32	$ 84.08	$ 85.88
ANT-064H	Sr. Functional Analyst/Specialist	$ 99.37	$ 101.49	$ 103.67	$ 105.88	$ 108.15	$ 110.46
ANT-065H	Principal Functional Analyst/Specialist	$ 104.26	$ 106.49	$ 108.77	$ 111.10	$ 113.48	$ 115.91
ANT-066H	Sr. Principal Functional Analyst/Specialist	$ 145.05	$ 148.16	$ 151.33	$ 154.56	$ 157.87	$ 161.25
ANT-067H	Data Management Specialist	$ 115.85	$ 118.33	$ 120.86	$ 123.45	$ 126.09	$ 128.79
ANT-068H	Data Administrator	$ 111.30	$ 113.68	$ 116.11	$ 118.59	$ 121.13	$ 123.72
ANT-069H	Data Manager	$ 142.96	$ 146.02	$ 149.15	$ 152.34	$ 155.60	$ 158.93
ANT-070H	Computer Operations Manager	$ 86.31	$ 88.16	$ 90.04	$ 91.97	$ 93.94	$ 95.95
ANT-071H	Sr. Computer Operations Manager	$ 126.69	$ 129.40	$ 132.17	$ 135.00	$ 137.89	$ 140.84
ANT-076H	Communications Engineer	$ 115.67	$ 118.15	$ 120.68	$ 123.26	$ 125.90	$ 128.59
ANT-077H	Sr. Communications Engineer	$ 132.50	$ 135.34	$ 138.24	$ 141.19	$ 144.22	$ 147.30
ANT-078H	Jr. Network Engineer	$ 77.78	$ 79.45	$ 81.15	$ 82.88	$ 84.66	$ 86.47
ANT-079H	Network Engineer	$ 87.04	$ 88.90	$ 90.80	$ 92.75	$ 94.73	$ 96.76
ANT-080H	Staff Network Engineer	$ 108.03	$ 110.34	$ 112.70	$ 115.11	$ 117.57	$ 120.09
ANT-081H	Sr. Network Engineer	$ 117.59	$ 120.11	$ 122.68	$ 125.30	$ 127.98	$ 130.72
ANT-082H	Principal Network Engineer	$ 159.19	$ 162.59	$ 166.07	$ 169.63	$ 173.26	$ 176.97
ANT-083H	Network Administrator	$ 100.43	$ 102.58	$ 104.78	$ 107.02	$ 109.31	$ 111.65
ANT-084H	Sr. Network Administrator	$ 124.59	$ 127.26	$ 129.98	$ 132.76	$ 135.60	$ 138.51
ANT-088H	Network/Computer Support Specialist	$ 82.05	$ 83.80	$ 85.60	$ 87.43	$ 89.30	$ 91.21
ANT-089H	Computer System/Network Integ Engin	$ 89.15	$ 91.05	$ 93.00	$ 94.99	$ 97.02	$ 99.10
ANT-092H	Sr. Telecommunications Analyst	$ 83.05	$ 84.83	$ 86.64	$ 88.50	$ 90.39	$ 92.33

Cat #	Category Name	Contract Year 5 GSA Price with IFF (11/21/18 to 11/20/19)	Contract Year 6 GSA Price with IFF (11/21/19 to 11/20/20)	Contract Year 7 GSA Price with IFF (11/21/20 to 11/20/21)	Contract Year 8 GSA Price with IFF (11/21/21 to 11/20/22)	Contract Year 9 GSA Price with IFF (11/21/22 to 11/20/23)	Contract Year 10 GSA Price with IFF (11/21/23 to 11/20/24)
ANT-093H	Communications Network Manager	$ 104.56	$ 106.80	$ 109.08	$ 111.42	$ 113.80	$ 116.24
ANT-102H	Hardware Specialist	$ 88.90	$ 90.80	$ 92.75	$ 94.73	$ 96.76	$ 98.83
ANT-103H	Quality Assurance/IV&V Analyst	$ 79.61	$ 81.31	$ 83.05	$ 84.83	$ 86.64	$ 88.50
ANT-104H	Quality Assurance/IV&V Specialist	$ 82.40	$ 84.16	$ 85.96	$ 87.80	$ 89.68	$ 91.60
ANT-105H	Quality Assurance IV&V Manager	$ 133.59	$ 136.45	$ 139.37	$ 142.35	$ 145.39	$ 148.51
ANT-108H	Configuration Management Specialist	$ 99.39	$ 101.52	$ 103.69	$ 105.91	$ 108.17	$ 110.49
ANT-109H	Sr. Configuration Mgt. Specialist	$ 120.25	$ 122.82	$ 125.45	$ 128.13	$ 130.88	$ 133.68
ANT-111H	Training Specialist/Instructor	$ 74.91	$ 76.52	$ 78.15	$ 79.83	$ 81.54	$ 83.28
ANT-112H	Sr. Training Specialist/Instructor	$ 99.23	$ 101.35	$ 103.52	$ 105.74	$ 108.00	$ 110.31
ANT-114H	Training Specialist	$ 74.91	$ 76.52	$ 78.15	$ 79.83	$ 81.54	$ 83.28
ANT-115H	Sr. Training Specialist	$ 99.12	$ 101.25	$ 103.41	$ 105.63	$ 107.89	$ 110.19
ANT-116H	Principal Training Specialist	$ 119.57	$ 122.13	$ 124.75	$ 127.42	$ 130.14	$ 132.93
ANT-119H	Testing and Validation Specialist	$ 68.29	$ 69.75	$ 71.25	$ 72.77	$ 74.33	$ 75.92
ANT-121H	Principal Testing and Validation Specialist	$ 108.12	$ 110.44	$ 112.80	$ 115.21	$ 117.68	$ 120.20
ANT-123H	Instructional System Designer	$ 85.85	$ 87.69	$ 89.57	$ 91.48	$ 93.44	$ 95.44
ANT-124H	Sr. Instructional System Designer	$ 102.18	$ 104.37	$ 106.60	$ 108.88	$ 111.21	$ 113.59
ANT-128H	Staff Graphic Design Specialist	$ 77.56	$ 79.22	$ 80.91	$ 82.64	$ 84.41	$ 86.22
ANT-129H	Sr. Graphic Design Specialist	$ 89.44	$ 91.35	$ 93.31	$ 95.30	$ 97.34	$ 99.43
ANT-130H	Principal Graphic Design Specialist	$ 108.12	$ 110.44	$ 112.80	$ 115.21	$ 117.68	$ 120.20
ANT-133H	Contract Administrator	$ 77.94	$ 79.61	$ 81.32	$ 83.06	$ 84.83	$ 86.65
ANT-134H	Sr. Contracts Administrator	$ 104.56	$ 106.80	$ 109.08	$ 111.42	$ 113.80	$ 116.24
ANT-137H	Program Management Specialist	$ 75.63	$ 77.25	$ 78.90	$ 80.59	$ 82.32	$ 84.08
ANT-138H	Sr. Program Management Specialist	$ 99.69	$ 101.83	$ 104.01	$ 106.23	$ 108.51	$ 110.83
ANT-139H	Principal Program Management Specialist	$ 114.91	$ 117.37	$ 119.88	$ 122.45	$ 125.07	$ 127.75
ANT-148H	Sr. Documentation Specialist	$ 93.57	$ 95.57	$ 97.61	$ 99.70	$ 101.84	$ 104.02
ANT-150H	Technical Editor	$ 98.00	$ 100.10	$ 102.24	$ 104.43	$ 106.66	$ 108.94

Rates are escalated 2.14% annually

OCONUS Labor: GDIT's rates are for CONUS efforts only. For OCONUS efforts GDIT will increase the labor rates by the applicable U.S. State Department published differentials. Other related international expenses required to support employees outside of the continental United States may be charged as ODCs (including but not limited to, special space costs, taxes, Defense Base Act (DBA) Workers' Compensation insurance, travel accident insurance, and possible telecommunications costs) in our task order proposals.

SIN 541519PIV HSPD-12 AUTHENTICATION PRODUCTS AND SERVICES DESCRIPTION

HSPD-12 Managed Services include:

- PIV Enrollment and Registration
- PIV System Infrastructure
- PIV Card Management and Production
- PIV Card Activation and Finalization
- PIV Systems Integration

Pricing is based on a mandatory 5-year agreement for the specified card quantity (minimum of 20,000 cards). The following is included in the Standard HSPD-12 Managed Services price:

- GDIT will provide all hardware and software, including maintenance and upgrades, throughout the life of the agreement. GDIT owns all the hardware and software, which must be returned to GDIT at the completion of the agreed-to Managed Services term.
- Card Personalization is based on a centralized personalization model to be performed at a GDIT-specified Card Production Facility (CFP). Personalized cards will be sent via an approved secure means to the designated Card Activation and Finalization station for activation and issuance to the Applicant.
- In accordance with the client's processes, each Applicant who successfully completes the background investigation (i.e., NAC-I) will receive a PIV-II compliant card.
- All contractor program management and administrative costs.
- Startup services to include:
    - Configuration of the HSPD-12 infrastructure and databases for the client agency's business processes.
    - Definition of one (1) card profile (graphical and electrical) to govern the format of the cards to be produced.
    - Establishment of an agency-specific portal to provide support for the PIV roles (e.g., Sponsor, Enrollment Official, Adjudicator, Issuer, etc.), including on-line training for these roles.
    - Documentation of requirements that will be supported by HSPD-12.
    - Security Certification and Accreditation (C&A) documentation.
    - Price per card offering assumes the ordered quantity of cards (20,000 minimum) will be issued in the first continuous twelve month period. Volume discounts are available, calculated from the 20,000 minimum order price.
    - Price per card assumes a single agency or department is to be supported.
- HSPD-12 Systems Infrastructure housed in a GDIT-provided secure facility.
- Combined PIV Enrollment and Registration/Card Activation and Finalization workstations to be located at the client's site. GDIT will provide facility requirements to the Government. One (1) workstation will be provided for every 4,000-card commitment. Installation of the workstation is not included in the card pricing but can be purchased separately.
- Up to three (3) PKI certificates per card.
- OCSP services are included in the card pricing.
- Training via on-line portal for various roles.
- No interfaces to other agency systems are provided.
- Services to support all HSPD-12 life cycle activities, including:
    - Issuance
    - Renewal
    - Replacement of lost, stolen, or damaged card
    - Change of demographic information, such as name
    - Temporary inactivation
    - Termination and permanent inactivation

- Tier 2 and 3 Help Desk support (8am – 5pm, excluding weekends and holidays). Client will provide Tier 1 support.

A Service Level Agreement (SLA), based on the Customer Requirements, will be established with each order to define the services to be delivered and the performance metrics.

Travel: All pricing is exclusive of travel. Allowable travel and per diem charges are governed by Public Law 99-234 and FAR Part 31, and are reimbursable by the ordering agency or can be priced as a fixed price item on orders.

Delivery Schedule: To be negotiated for each task order.

GDIT HSPD-12 Managed Service Pricing – with Volume Discounts

Part No.	Managed Services	Description	No. of Cards		1st Year Enrollment and Services - Price per Card	Discount From Minimum Quantity Price	
ANT-HSPD12-MS-20	Managed Services for HSPD-12 credentials	Managed Services for Personal Identity Verification (PIV) Systems Integration, PIV Enrollment and Registration, PIV Systems Infrastructure, PIV Card Management and Production, and PIV Card Activation and Finalization. (see detailed description for HSPD-12 Managed Services)	20,000 - 99,999		**$255.66**	0%	
ANT-HSPD12-MS-100	Managed Services for HSPD-12 credentials	Managed Services for Personal Identity Verification (PIV) Systems Integration, PIV Enrollment and Registration, PIV Systems Infrastructure, PIV Card Management and Production, and PIV Card Activation and Finalization. (see detailed description for HSPD-12 Managed Services)	100,000 - 249,999		**$88.51**	65.3798%	
ANT-HSPD12-MS-250	Managed Services for HSPD-12 credentials	Managed Services for Personal Identity Verification (PIV) Systems Integration, PIV Enrollment and Registration, PIV Systems Infrastructure, PIV Card Management and Production, and PIV Card Activation and Finalization. (see detailed description for HSPD-12 Managed Services)	250,000 - 499,999		**$61.47**	75.9563%	
ANT-HSPD12-MS-500	Managed Services for HSPD-12 credentials	Managed Services for Personal Identity Verification (PIV) Systems Integration, PIV Enrollment and Registration, PIV Systems Infrastructure, PIV Card Management and Production, and PIV Card Activation and Finalization. (see detailed description for HSPD-12 Managed Services)	500,000 - 999,999		**$50.15**	80.38%	
ANT-HSPD12-MS-1000	Managed Services for HSPD-12 credentials	Managed Services for Personal Identity Verification (PIV) Systems Integration, PIV Enrollment and Registration, PIV Systems Infrastructure, PIV Card Management and Production, and PIV Card Activation and Finalization. (see detailed description for HSPD-12 Managed Services)	1,000,000 +		**$46.18**	81.93695%	

ANT-HSPD12-MS-20-AM	Managed Services for HSPD-12 credentials	Annual Maintenance for Years 2 through 5; Price per Card	20,000 - 99,999		**$87.52**	0%	
ANT-HSPD12-MS-100-AM	Managed Services for HSPD-12 credentials	Annual Maintenance for Years 2 through 5; Price per Card	100,000 - 249,999		**$33.62**	0%	
ANT-HSPD12-MS-250-AM	Managed Services for HSPD-12 credentials	Annual Maintenance for Years 2 through 5; Price per Card	250,000 - 499,999		**$24.39**	0%	
ANT-HSPD12-MS-500-AM	Managed Services for HSPD-12 credentials	Annual Maintenance for Years 2 through 5; Price per Card	500,000 - 999,999		**$20.15**	0%	
ANT-HSPD12-MS-1000-AM	Managed Services for HSPD-12 credentials	Annual Maintenance for Years 2 through 5; Price per Card	1,000,000 +		**$19.47**	0%	

SIN ANCILLARY – Ancillary Services to support SIN 541370GEO Earth Observation Solutions, SIN 54151S IT Professional Services and SIN 54151HEAL Health IT Services

Ancillary supplies and/or services are support supplies and services which are not within the scope of any other SIN on this schedule. These supplies and/or services may only be ordered in conjunction with or in support of supplies and/or services purchased under another SIN(s) in this solicitation to provide a solution to a customer requirement. This SIN may be used for orders and blanket purchase agreements that involve work or a project that is solely associated with the supplies and/or services purchased under this schedule. This SIN EXCLUDES purchases that are exclusively for supplies and/or services already available under another schedule and is limited to information technology (IT) products and/or services.

Special Instructions: The work performed under this SIN shall be associated with existing SINs that are part of this schedule. Ancillary supplies and/or services shall not be the primary purpose of the work ordered, but be an integral part of the total solution offered. Ancillary supplies and/or services may only be ordered in conjunction with or in support of supplies and/or services purchased under another SIN in this schedule. Offerors may be required to provide additional information to support a determination that their proposed ancillary supplies and/or services are commercially offered in support of one or more SINs under this schedule.

Note: Commercially available products under this solicitation may be covered by the Energy

SIN ANCILLARY – Ancillary Services Labor Category Requirements and Descriptions to support SIN 541370GEO Earth Observation Solutions

LABOR CATEGORIES, EDUCATION AND YEARS OF EXPERIENCE

No.	Labor Categories	Education	Years Experience
ANT-106	Logistics Specialist	*	3

* See Labor Category Descriptions for Specialized Training and Minimum Qualifications

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

Education/Experience Substitutions

The following presents the allowable substitutions based on education and experience:

Four (4) years' experience (in addition to minimum experience requirements) may be substituted for a Bachelor's degree.

Two (2) years' experience (in addition to minimum experience requirements and Bachelor's degree) may be substituted for a Master's degree.

Two (2) years' experience (in addition to minimum requirements and Master's degree) may be substituted for a Ph.D.

For categories where a Bachelor's degree is required, a Master's degree may be substituted for two (2) years' experience; or a doctoral degree may be substituted for three (3) years' experience.

Successful completion of each course in specialized or emerging technology (Windows 2000/XP, Oracle, Powerbuilder, Web development, internet/intranet security, and XML, etc.) may be substituted for one year of experience.

For the categories of JR Network Engineer, Network Engineer, Staff Network Engineer, and Communications Network Manager, a Certificate in a related technology (certified Network Engineer, for example) may be substituted for the degree requirement.

SIN ANCILLARY - LABOR CATEGORY DESCRIPTIONS

ANT-106 - EOS Logistics Specialist

Minimum/General Experience: Requires three years' experience in the electronics field. Specific experience with electronic hardware is required. Experience with CAD drawing practices and database software is required.

Functional Responsibility: Identifies Configuration Items (CI) and establishes and maintains a CI baseline inventory database. Conducts periodic audits of DI's to monitor the status of the inventory. Originates and maintains Configuration Management (CM) databases, files and drawings. Maintains spare parts, equipment and consumable inventory databases. Issues supplies and equipment. Maintains statistical analysis of usage.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	3 years
AA/AS	1 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

SIN ANSILLARY- Ancillary services rates supporting SIN 541370GEO Earth Observation Solutions

Cat #	Category Name	Contract Year 5 GSA Price with IFF (11/21/18 to 11/20/19)	Contract Year 6 GSA Price with IFF (11/21/19 to 11/20/20)	Contract Year 7 GSA Price with IFF (11/21/20 to 11/20/21)	Contract Year 8 GSA Price with IFF (11/21/21 to 11/20/22)	Contract Year 9 GSA Price with IFF (11/21/22 to 11/20/23)	Contract Year 10 GSA Price with IFF (11/21/23 to 11/20/24)
ANT-106	Logistics Speciallist**	$ 69.60	$ 71.09	$ 72.61	$ 74.17	$ 75.75	$ 77.37

Overtime: Should overtime be required and authorized, GDIT will invoice the Government at one and one-half Times the task order negotiated labor rates for categories determined to be covered by the SCA (identified ** above).

SIN ANCILLARY –Ancillary Services Labor Category Requirements and Descriptions to support SIN 54151S IT Professional Services

LABOR CATEGORIES, EDUCATION AND YEARS OF EXPERIENCE

***These LCATS should be used to support to support services under SIN 54151S IT Professional Services**

No.	Labor Categories	Education	Years Experience
ANT-044	JR Computer Programmer/Analyst	BA/BS	*
ANT-056	JR Computer Systems Analyst	AA/AS	*
ANT-072	System Administrator/Operator	AA/AS	4
ANT-073	JR Computer Operator	*	*
ANT-074	Computer Operator	*	3
ANT-085	Network/Computer Support Technician	*	2
ANT-086	SR Network/Computer Support Technician	*	3
ANT-091	Telecommunications Analyst	AA/AS	1
ANT-097	JR Help Desk Technician	*	*
ANT-098	Help Desk Technician	*	1
ANT-099	SR Help Desk Technician	*	3
ANT-100	Electronics/Electrical Technician	*	3
ANT-106	Logistics Specialist	*	3
ANT-126	JR Graphics Design Specialist	*	*
ANT-127	Graphics Design Specialist	AA/AS	3
ANT-131	Videographer/Editor	AA/AS	*
ANT-136	JR Program Management Specialist	BA/BS	*
ANT-140	JR Program Support Specialist	AA/AS	*
ANT-141	Program Support Specialist	BA/BS	5
ANT-142	SR Program Support Specialist	BA/BS	7
ANT-143	JR Admin/Data Analyst	*	*
ANT-144	Admin/Data Analyst	*	2
ANT-147	Documentation Specialist	*	*
ANT-149	Technical Writer	BA/BS	3
ANT-156	Technical Typist	*	*
ANT-157	Data Entry Clerk	*	*

* See Labor Category Descriptions for Specialized Training and Minimum Qualifications

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

Education/Experience Substitutions

The following presents the allowable substitutions based on education and experience:

Four (4) years' experience (in addition to minimum experience requirements) may be substituted for a Bachelor's degree.

Two (2) years' experience (in addition to minimum experience requirements and Bachelor's degree) may be substituted for a Master's degree.

Two (2) years' experience (in addition to minimum requirements and Master's degree) may be substituted for a Ph.D.

For categories where a Bachelor's degree is required, a Master's degree may be substituted for two (2) years' experience; or a doctoral degree may be substituted for three (3) years' experience.

SIN ANCILLARY - LABOR CATEGORY DESCRIPTIONS

ANT-044 JR Computer Programmer/Analyst

Minimum/General Experience: None required. Entry-level position.

Functional Responsibility: Tests assigned software units to ensure accurate design; evaluates, reports, and corrects any discrepancies found during the testing process; configures computers and other peripherals; makes software changes when needed; codes programs to improve program effectiveness and efficiency; works with customers/clients to identify and solve programming problems; creates, modifies, and maintains new software applications as assigned; troubleshoots various software products to determine source of errors; prepares and updates operating procedures, specifications, and other documentation of various software products; may assist in the design and development of computer-based and/or multimedia courseware for customer training initiatives; installs software products on computer hardware.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	4 years
AA/AS	2 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-056 Jr. Computer Systems Analyst

Minimum/General Experience: Requires no experience and knowledge of the fundamental concepts, practices and procedures used in most phases of systems analysis; knowledge of pertinent system software and computer equipment. Depending on the job assignment, knowledge of or certification in specific applications or processes may be required.

Functional Responsibility: Analyzes user needs and identifies resources required for each task to determine functional requirements; codes applications and tests to software requirements; assists in design and development of new systems or modifies existing systems that meet the user's needs; assists higher-level analysts in analyzing alternative systems, cost aspects and feasibility factors; writes or updates software specifications; records all inputs and outputs of systems, including file sizes, data bank requirements, variability of information and appropriate statistical measures such as frequency, volume, peaking, etc; prepares appropriate documentation for new or existing systems; troubleshoots and provides technical support and solutions to users.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	2 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-072 System Administrator/Operator

Minimum/General Experience: Must have at least four years' experience, of which at least two years are specialized experience in administrating UNIX or open systems-compliant systems.

Functional Responsibility: Designs, installs, modifies and maintains local area networks (LANs). Responsible for troubleshooting and making necessary adjustments in network operating system, software and hardware. Works with other staff to design, develop, install, test, debug, modify and maintain distributed processing databases on the LAN.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	6 years
BA/BS	2 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-073 JR Computer Operator

Minimum/General Experience: Requires no experience

Functional Responsibility: Performs duties to operate computer and peripheral equipment such as printers, tape and disk drives; sets up, monitors, and controls computer and peripheral equipment; maintains records regarding output units and supply inventories; sets up printers for routine print jobs; assists in performing back-ups; routes error messages to appropriate personnel.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	0 years
AA/AS	0 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-074 Computer Operator

Minimum/General Experience: Must have at least three years' experience of which at least one year must be specialized to include supervisory computer operator

experience.

Functional Responsibility: Performs duties to operate computer consoles and peripheral equipment such as printers, tape and disk drives IAW site-specific operating procedures; maintains records regarding output units and supply inventories; sets up printers for routine print jobs; assists in performing back-ups and routes error messages to appropriate personnel. May supervise other Computer Operators.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	3 years
AA/AS	1 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-085 Network/Computer Support Technician

Minimum/General Experience: Must have two years' experience in computer/network operations, equipment/network maintenance, and configuration upgrading or specialized workstation operation activities.

Functional Responsibility: Responsible for information systems and network operations, network management and any ancillary IT support functions.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	2 years
AA/AS	0 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-086 SR Network/Computer Support Technician

Minimum/General Experience: Must have three years' directly related experience in computer/network operations. Also requires some knowledge of the following: principles, methods, and techniques used in network troubleshooting and support, modems, data scopes, patch panels, concentrators, associated terminals, and network management software, and Desk Top Operating Systems and Applications. May require certification of a specific application, depending on job assignment.

Functional Responsibility: Responsible for information systems and network operations, network management and any ancillary IT support functions--assists with the installation and configuration of computer hardware; provides end-user software troubleshooting and support; provides network troubleshooting and support; diagnoses hardware, software and operator problems and corrects them as instructed; participates in the development of IT infrastructure processes; may provide end-user training.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	3 years
AA/AS	1 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-091 Telecommunications Analyst

Minimum/General Experience: Most have at least one year directly related experience in telecommunications systems design and support. Must also have knowledge of the fundamental concepts used in telecommunications systems administration and support as well as relevant hardware and software systems.

Functional Responsibility: Evaluates, designs, and maintains existing and proposed data telecommunications systems; analyzes the telecommunications needs of the user and recommends solutions; designs, develops, and tests telecommunications software solutions; prepares detailed specifications and flow charts for implementation of new internal programs or modification to vendor software; coordinates installation of equipment; monitors the operations of telecommunications systems and services of vendors; provides end user training of telecommunications features and functionality.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	3 years
AA/AS	1 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-097 JR Help Desk Technician

Minimum/General Experience: Requires no experience and basic knowledge of the principles, methods, and techniques used in network troubleshooting and support as well as modems, data scopes, patch panels, concentrators, associated terminals, and network management software. Knowledge of or certification in

one or more specific applications or processes may be required, depending on job assignment.

Functional Responsibility: Assists with the installation, configuration, and upgrade of computer hardware and software; provides end-user software troubleshooting and support; applies basic diagnostic techniques to identify problems, investigate causes, and recommend solutions; provides network troubleshooting and support; assists in the administration of e-mail systems; provides phone and help-desk support for local and off-site users.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	0 years
AA/AS	0 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-098 Help Desk Technician

Minimum/General Experience: Must have at least one year directly related experience in help desk or network support. Also requires knowledge of the principles, methods, and techniques used in network troubleshooting and support as well as modems, data scopes, patch panels, concentrators, associated terminals, and network management software. Knowledge of or certification in one or more specific applications or processes may be required, depending on job assignment.

Functional Responsibility: Participates in the installation, configuration, and upgrade of computer hardware and software; provides end-user software troubleshooting and support; applies diagnostic techniques to identify problems, investigate causes, and recommend solutions; provides network troubleshooting and support; assists in the administration of e-mail systems; provides phone and help-desk support for local and off-site users.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	1 years
AA/AS	0 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-099 SR Help Desk Technician

Minimum/General Experience: Must have at least three years' directly related experience in help desk or network support. Also requires thorough knowledge of the principles, methods, and techniques used in network troubleshooting and support as well as modems, data scopes, patch panels, concentrators, associated terminals, and network management software. Knowledge of or certification in one or more specific applications or processes may be required, depending on job assignment.

Functional Responsibility: Performs installation, configuration, and upgrade of computer hardware and software; provides end-user software troubleshooting and support; applies advanced diagnostic techniques to identify problems, investigate causes, and recommend solutions; provides network troubleshooting and support; may participate in the administration and design of websites; participates in the administration of e-mail systems; provides phone and help-desk support for local and off-site users; assists lower level technicians with complex problems.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	3 years
AA/AS	1 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-100 Electronics/Electrical Technician

Minimum/General Experience: Requires a minimum of three years' practical experience in the field of electronic repair and installation and experience in module assembly repair and test. Requires in depth knowledge of the principles of electricity, electronics and shop practices and techniques including electrical and electronic circuitry.

Functional Responsibility: Responsible for conducting design, installation, check-out, testing, troubleshooting and repair of electronic equipment. Responsible for the installation, alteration and repair of electrical systems and components. Installations must be accomplished to comply with applicable codes and technical specifications.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	3 years
AA/AS	1 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-106 Logistics Specialist

Minimum/General Experience: Requires three years' experience in the electronics field. Specific experience with electronic hardware is required. Experience with CAD drawing practices and database software is required.

Functional Responsibility: Identifies Configuration Items (CI) and establishes and maintains a CI baseline inventory database. Conducts periodic audits of DI's to monitor the status of the inventory. Originates and maintains Configuration Management (CM) databases, files and drawings. Maintains spare parts, equipment and consumable inventory databases. Issues supplies and equipment. Maintains statistical analysis of usage.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	3 years
AA/AS	1 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-126 JR Graphics Design Specialist

Minimum/General Experience: Must have at least three years' experience of which at least one year is specialized to include developing graphics/artistic presentations for publications and documents (preferably technical documentation). Use of commercial word processing and graphics software programs. Experience with desktop publishing systems is desirable. Must demonstrate the ability to work independently or under only general direction.

Functional Responsibility: Shall support the development of all contract deliverables and reports by developing and updating graphics presentations to improve the quality and enhance the usability of these documents. Shall be responsible for integrating the graphics generated with automated tools and the deliverable documents.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	3 years
AA/AS	1 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-127 Graphics Design Specialist

Minimum/General Experience: Requires at least three years' directly related experience in graphics design. Also requires knowledge of the principles, methods, and techniques used in the preparation of graphics materials and associated software and equipment. Requires experience using graphics software programs.

Functional Responsibility: Participates in the design, layout, and production of brochures, pamphlets, briefings, displays, and other materials; makes recommendations on methods and materials; assist in the creation of overhead presentations, including graphics, charts, photos, and clip-art; creates displays to represent certain accomplishments to be highlighted; creates other graphic materials at client request, including scanned documents, photography, or signs; determines style, size and arrangement of type and illustrations; may participate in the design and creation of videos using computer and video equipment and cameras; may work from rough sketches, engineering drawings or other documentation; may exercise creative judgment by translating needs into graphics capabilities; uses various computer graphics software programs.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	5 years
BA/BS	1 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-131 Videographer/Editor

Minimum/General Experience: Requires no experience .

Functional Responsibility: Sets up and operates video cameras and related audio, lighting and recording equipment used in instructional systems and incorporating interactive video disk technology; performs off-line video editing; advises producer/director regarding shot composition and assists in post production shot selection; accomplishes off-line video narrative, editing, special effects and animation along with quality control of off-line video tape; may develop computer graphics; functions as an on-site team participant under the direction of the producer/director.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	2 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-136 JR Program Management Specialist

Minimum/General Experience: Requires no experience. Requires demonstrated effective organizational skills and knowledge of word processing, spreadsheet, and/or other pertinent software applications.

Functional Responsibility: Responsible for management, performance and completion of routine projects associated with a contract program; collects and evaluates data for monitoring development and life-cycle requirements of various programs and systems; creates program cost estimates to support program cost/schedule/technique audits or to generate budget submissions; uses computer programs and models to track program data; maintains contact with customer to ensure conformance to customer requirements.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	4 years
AA/AS	2 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-140 JR Program Support Specialist

Minimum/General Experience: Requires no experience. Demonstrated administrative and organizational skills. Also requires knowledge of word processing, spreadsheet, and/or other pertinent software applications.

Functional Responsibility: Provides program analytical support for the day-to-day operations as well as long range appraisal and decision processes; acquires, maintains, retrieves and analyzes technical and financial program data using various database programs; interprets, integrates and disseminates large volumes of technical data; assists in generating, processing and monitoring program requirements for activities and documents; coordinates and schedules meetings for management; assists with the preparation of monthly status reports of task accomplishments, financial data, and staffing reports.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	2 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-141 Program Support Specialist

Minimum/General Experience: Requires at least five years' related administrative experience. Demonstrated administrative and organizational skills. Also requires knowledge of word processing, spreadsheet, and/or other pertinent software applications.

Functional Responsibility: Provides program analytical support for the day-to-day operations as well as long range appraisal and decision processes; acquires, maintains, retrieves and analyzes technical and financial program data using various database programs; applies program knowledge and experience to identify and meet current and future program requirements; interprets, integrates and disseminates large volumes of technical data; generates, processes and monitors program requirements for activities and documents; coordinates and schedules meetings for customers and management; prepares regular status reports of task accomplishments, financial data, and staffing reports; coordinates the preparation of presentation materials and documents.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-142 SR Program Support Specialist

Minimum/General Experience: Requires at least seven years' related administrative experience. Demonstrated administrative and organizational skills. Also requires knowledge of word processing, spreadsheet, and/or other pertinent software applications.

Functional Responsibility: Provides program analytical support for the day-to-day operations as well as long range appraisal and decision processes; acquires, maintains, retrieves and analyzes technical and financial program data using various database programs; applies program knowledge and experience to identify and meet current and future program requirements; interprets, integrates and disseminates large volumes of technical data; generates, processes and monitors program requirements for activities and documents; acts as liaison between management and the customer; coordinates and schedules meetings for customers and management; prepares regular status reports of task accomplishments, financial data, and staffing reports; prepares presentation materials and documents; may provide work leadership to lower level specialists.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years

MA/MS	5 years
Doctorate Degree/Ph.D.	4 years

ANT-143 JR Admin/Data Analyst

Minimum/General Experience: Requires no experience. Also requires knowledge of general administrative and organizational skills and use of associated office equipment.

Functional Responsibility: Responsible for input and verification of data; reviews source documents for accuracy of input data; reviews, follows up and resolves errors during processing cycle; maintains files; reviews and distributes reports.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	0 years
AA/AS	0 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-144 Admin/Data Analyst

Minimum/General Experience: Requires at least two years' related experience. Also requires knowledge of general administrative and organizational skills and use of associated office equipment.

Functional Responsibility: Responsible for input and verification of data; reviews source documents for accuracy of input data; reviews, follows up and resolves errors during processing cycle; may be responsible for integrity of certain database information; investigates questionable data and takes corrective action when necessary; maintains files; generates reports and may analyze specific database information.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	2 years
AA/AS	0 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-147 Documentation Specialist

Minimum/General Experience: Must have two years' experience in composing and producing technical documentation or one year experience in composing and producing technical documentation plus a college degree.

Functional Responsibility: Composes and finalizes technical documentation including specifications, user manuals, etc. in the style, content and format required by the relevant standards using input received from technical personnel.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	2 years
AA/AS	0 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-149 Technical Writer

Minimum/General Experience: Must have three years' experience, of which at least one must be specialized. Specialized experience includes: demonstrated experience in editing documents, including technical documents. Must demonstrate the ability to work independently or under only general direction.

Functional Responsibility: Assist in collection and organizing information required for preparation of user manuals, training materials, installation guides, proposals, and reports. Edit functional descriptions, system specifications, user manuals, special reports, or any other customer deliverables and documents. Assists in performing financial and administrative functions.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	7 years
AA/AS	5 years
MA/MS	1 years
Doctorate Degree/Ph.D.	0 years

ANT-156 Technical Typist

Minimum/General Experience: Must have at least two years' experience in a technical typing position. At least one year's experience working as a technical typist preparing computer system documentation or documenting developed software requirements.

Functional Responsibility: Prepares draft and final form technical documents. Must be capable of typing at average or above average speed. Must be capable of typing technical narratives and data. Responsible for

spelling, grammar, and proper format, and for proofreading finished documents. Must be capable of using various word processing equipment.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	2 years
AA/AS	0 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-157 Data Entry Clerk

Minimum/General Experience: Must have at least one year's experience in data entry and verification. Typically required to work under close supervision and direction.

Functional Responsibility: Performs data entry via on-line data terminal, key-to-tape, key-to-disk, or similar devices. Verifies data entered, where applicable.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	1 years
AA/AS	0 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

SIN ANCILLARY- Ancillary services rates supporting SIN 54151S IT Professional Services

Cat #	Category Name	Contract Year 5 GSA Price with IFF (11/21/18 to 11/20/19)	Contract Year 6 GSA Price with IFF (11/21/19 to 11/20/20)	Contract Year 7 GSA Price with IFF (11/21/20 to 11/20/21)	Contract Year 8 GSA Price with IFF (11/21/21 to 11/20/22)	Contract Year 9 GSA Price with IFF (11/21/22 to 11/20/23)	Contract Year 10 GSA Price with IFF (11/21/23 to 11/20/24)
ANT-044	Jr. Computer Programmer/Analyst**	$ 64.26	$ 65.64	$ 67.04	$ 68.48	$ 69.94	$ 71.44
ANT-056	Jr. Computer Systems Analyst**	$ 67.36	$ 68.80	$ 70.27	$ 71.77	$ 73.31	$ 74.88
ANT-072	System Administrator/Operator**	$ 63.92	$ 65.29	$ 66.69	$ 68.11	$ 69.57	$ 71.06
ANT-073	Jr. Computer Operator**	$ 46.13	$ 47.11	$ 48.12	$ 49.15	$ 50.20	$ 51.28
ANT-074	Computer Operator**	$ 51.64	$ 52.75	$ 53.88	$ 55.03	$ 56.21	$ 57.41
ANT-085	Network/Computer Support Technician**	$ 63.92	$ 65.29	$ 66.69	$ 68.11	$ 69.57	$ 71.06
ANT-086	Sr. Network/Computer Support Technician**	$ 70.83	$ 72.35	$ 73.89	$ 75.47	$ 77.09	$ 78.74
ANT-091	Telecommunications Analyst**	$ 76.92	$ 78.56	$ 80.25	$ 81.96	$ 83.72	$ 85.51
ANT-097	Jr. Help Desk Technician**	$ 57.54	$ 58.77	$ 60.03	$ 61.31	$ 62.62	$ 63.96
ANT-098	Help Desk Technician**	$ 63.92	$ 65.29	$ 66.69	$ 68.11	$ 69.57	$ 71.06
ANT-099	Sr. Help Desk Technician**	$ 70.83	$ 72.35	$ 73.89	$ 75.47	$ 77.09	$ 78.74
ANT-100	Electronics/Electrical Technician**	$ 64.53	$ 65.91	$ 67.32	$ 68.76	$ 70.23	$ 71.74
ANT-106	Logistics Speciallist**	$ 69.60	$ 71.09	$ 72.61	$ 74.17	$ 75.75	$ 77.37
ANT-126	Jr. Graphics Design Specialist**	$ 49.94	$ 51.00	$ 52.10	$ 53.21	$ 54.35	$ 55.51
ANT-127	Graphics Design Specialist**	$ 61.88	$ 63.20	$ 64.55	$ 65.93	$ 67.34	$ 68.79
ANT-131	Videographer/Editor**	$ 57.71	$ 58.94	$ 60.20	$ 61.49	$ 62.81	$ 64.15
ANT-136	Jr. Program Management Specialist**	$ 76.58	$ 78.21	$ 79.89	$ 81.60	$ 83.34	$ 85.13
ANT-140	Jr. Program Support Specialist**	$ 39.60	$ 40.44	$ 41.31	$ 42.19	$ 43.10	$ 44.02
ANT-141	Program Support Specialist**	$ 45.69	$ 46.67	$ 47.67	$ 48.69	$ 49.73	$ 50.79
ANT-142	Sr. Program Support Specialist**	$ 76.58	$ 78.21	$ 79.89	$ 81.60	$ 83.34	$ 85.13
ANT-143	Jr. Admin/Data Analyst**	$ 35.06	$ 35.81	$ 36.58	$ 37.36	$ 38.16	$ 38.98
ANT-144	Admin/Data Analyst**	$ 38.25	$ 39.07	$ 39.90	$ 40.76	$ 41.63	$ 42.52
ANT-147	Documentation Specialist**	$ 65.44	$ 66.84	$ 68.27	$ 69.73	$ 71.23	$ 72.75
ANT-149	Technical Writer**	$ 79.17	$ 80.86	$ 82.59	$ 84.36	$ 86.16	$ 88.01
ANT-156	Technical Typist**	$ 38.10	$ 38.91	$ 39.75	$ 40.60	$ 41.47	$ 42.35
ANT-157	Data Entry Clerk**	$ 35.06	$ 35.81	$ 36.58	$ 37.36	$ 38.16	$ 38.98

Overtime: Should overtime be required and authorized, GDIT will invoice the Government at one and one-half Times the task order negotiated labor rates for categories determined to be covered by the SCA (identified ** above).

SIN ANCILLARY –Ancillary Services Labor Category Requirements and Descriptions to support SIN 54151HEAL Health IT Professional Services

LABOR CATEGORIES, EDUCATION AND YEARS OF EXPERIENCE

***These LCATS should be used to support to support services under SIN 54151HEAL Health IT Professional Services**

No.	Labor Categories	Education	Years Experience
ANT-044H	JR Computer Programmer/Analyst	BA/BS	*
ANT-056H	JR Computer Systems Analyst	AA/AS	*
ANT-072H	System Administrator/Operator	AA/AS	4
ANT-073H	JR Computer Operator	*	*
ANT-074H	Computer Operator	*	3
ANT-085H	Network/Computer Support Technician	*	2
ANT-086H	SR Network/Computer Support Technician	*	3
ANT-091H	Telecommunications Analyst	AA/AS	1
ANT-097H	JR Help Desk Technician	*	*
ANT-098H	Help Desk Technician	*	1
ANT-099H	SR Help Desk Technician	*	3
ANT-100H	Electronics/Electrical Technician	*	3
ANT-106H	Logistics Specialist	*	3
ANT-126H	JR Graphics Design Specialist	*	*
ANT-127H	Graphics Design Specialist	AA/AS	3
ANT-131H	Videographer/Editor	AA/AS	*
ANT-136H	JR Program Management Specialist	BA/BS	*
ANT-140H	JR Program Support Specialist	AA/AS	*
ANT-141H	Program Support Specialist	BA/BS	5
ANT-142H	SR Program Support Specialist	BA/BS	7
ANT-143H	JR Admin/Data Analyst	*	*
ANT-144H	Admin/Data Analyst	*	2
ANT-147H	Documentation Specialist	*	*
ANT-149H	Technical Writer	BA/BS	3
ANT-156H	Technical Typist	*	*
ANT-157H	Data Entry Clerk	*	*

* See Labor Category Descriptions for Specialized Training and Minimum Qualifications

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

Education/Experience Substitutions

The following presents the allowable substitutions based on education and experience:

Four (4) years' experience (in addition to minimum experience requirements) may be substituted for a Bachelor's degree.

Two (2) years' experience (in addition to minimum experience requirements and Bachelor's degree) may be substituted for a Master's degree.

Two (2) years' experience (in addition to minimum requirements and Master's degree) may be substituted for a Ph.D.

For categories where a Bachelor's degree is required, a Master's degree may be substituted for two (2) years' experience; or a doctoral degree may be substituted for three (3) years' experience.

Successful completion of each course in specialized or emerging technology (Windows 2000/XP, Oracle, Powerbuilder, Web development, internet/intranet security, and XML, etc.) may be substituted for one year of experience.

For the categories of JR Network Engineer, Network Engineer, Staff Network Engineer, and Communications Network Manager, a Certificate in a related technology (certified Network Engineer, for example) may be substituted for the degree requirement.

SIN ANCILLARY - LABOR CATEGORY DESCRIPTIONS

ANT-044H JR. Computer Programmer/ Analyst

Minimum/General Experience: None required. Entry-level position.

Functional Responsibility: Tests assigned software units to ensure accurate design; evaluates, reports, and corrects any discrepancies found during the testing process; configures computers and other peripherals; makes software changes when needed; codes programs to improve program effectiveness and efficiency; works with customers/clients to identify and solve programming problems; creates, modifies, and maintains new software applications as assigned; troubleshoots various software products to determine source of errors; prepares and updates operating procedures, specifications, and other documentation of various software products; may assist in the design and development of computer-based and/or multimedia courseware for customer training initiatives; installs software products on computer hardware.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	4 years
AA/AS	2 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-056H Jr. Computer Systems Analyst

Minimum/General Experience: Requires no experience and requires knowledge of the fundamental concepts, practices and procedures used in most phases of systems analysis; knowledge of pertinent system software and computer equipment. Depending on the job assignment, knowledge of or certification in specific applications or processes may be required.

Functional Responsibility: Analyzes user needs and identifies resources required for each task to determine functional requirements; codes applications and tests to software requirements; assists in design and development of new systems or modifies existing systems that meet the user's needs; assists higher-level analysts in analyzing alternative systems, cost aspects and feasibility factors; writes or updates software specifications; records all inputs and outputs of systems, including file sizes, data bank requirements, variability of information and appropriate statistical measures such as frequency, volume, peaking, etc; prepares appropriate documentation for new or existing systems; troubleshoots and provides technical support and solutions to users.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	2 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-072H System Administrator/Operator

Minimum/General Experience: Must have at least four years' experience, of which at least two years are Health IT specialized experience in administrating UNIX or open systems-compliant systems.

Functional Responsibility: Designs, installs, modifies and maintains local area networks (LANs). Responsible for troubleshooting and making necessary adjustments in network operating system, software and hardware. Works with other staff to design, develop, install, test, debug, modify and maintain distributed processing databases on the LAN.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	6 years
BA/BS	2 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-073H JR Computer Operator

Minimum/General Experience: Requires no experience

Functional Responsibility: Performs duties to operate computer and peripheral equipment such as printers, tape and disk drives; sets up, monitors, and controls computer and peripheral equipment; maintains records regarding output units and supply inventories; sets up printers for routine print jobs; assists in performing back-ups; routes error messages to appropriate personnel.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	0 years
AA/AS	0 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-074H Computer Operator

Minimum/General Experience: Must have at least three years' experience of which at least one year must be specialized to include Health IT supervisory computer operator experience.

Functional Responsibility: Performs duties to operate computer consoles and peripheral equipment such as printers, tape and disk drives IAW site-specific operating procedures; maintains records regarding output units and supply inventories; sets up printers for routine print jobs; assists in performing back-ups and routes error messages to appropriate personnel. May supervise other Computer Operators.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	3 years
AA/AS	1 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-085H Network/Computer Support Technician

Minimum/General Experience: Must have two years' experience in Health IT computer/network operations, equipment/network maintenance, and configuration upgrading or specialized workstation operation activities.

Functional Responsibility: Responsible for information systems and network operations, network management and any ancillary IT support functions.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	2 years
AA/AS	0 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-086H SR Network/Computer Support Technician

Minimum/General Experience: Must have three years' directly related experience in Health IT computer/network operations. Also requires some knowledge of the following: principles, methods, and techniques used in network troubleshooting and support, modems, data scopes, patch panels, concentrators, associated terminals, and network management software, and Desk Top Operating Systems and Applications. May require certification of a specific application, depending on job assignment.

Functional Responsibility: Responsible for information systems and network operations, network management and any ancillary IT support functions--assists with the installation and configuration of computer hardware; provides end-user software troubleshooting and support; provides network troubleshooting and support; diagnoses hardware, software and operator problems and corrects them as instructed; participates in the development of IT infrastructure processes; may provide end-user training.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	3 years
AA/AS	1 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-091H Telecommunications Analyst

Minimum/General Experience: Must have at least one year directly related experience in Health IT telecommunications systems design and support. Must also have knowledge of the fundamental concepts used in telecommunications systems administration and support as well as relevant hardware and software systems.

Functional Responsibility: Evaluates, designs, and maintains existing and proposed data telecommunications systems; analyzes the telecommunications needs of the user and recommends solutions; designs, develops, and tests telecommunications software solutions; prepares detailed specifications and flow charts for implementation of new internal programs or modification to vendor software; coordinates installation of equipment; monitors the operations of telecommunications systems and services of vendors; provides end user training of telecommunications features and functionality.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	3 years
AA/AS	1 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-097H JR Help Desk Technician

Minimum/General Experience: Requires no experience or up to one year directly related experience in Health IT help desk or network support. Also requires basic knowledge of the principles, methods, and techniques used in network troubleshooting and support as well as modems, data scopes, patch panels, concentrators, associated terminals, and network management software. Knowledge of or certification in one or more specific applications or processes may be required, depending on job assignment.

Functional Responsibility: Assists with the installation, configuration, and upgrade of computer hardware and software; provides end-user software troubleshooting and support; applies basic diagnostic techniques to identify problems, investigate causes, and recommend solutions; provides network troubleshooting and support; assists in the administration of e-mail systems; provides phone and help-desk support for local and off-site users.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	0 years
AA/AS	0 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-098H Help Desk Technician

Minimum/General Experience: Must have at least one year directly related experience in Health IT help desk or network support. Also requires knowledge of the principles, methods, and techniques used in network troubleshooting and support as well as modems, data scopes, patch panels, concentrators, associated terminals, and network management software. Knowledge of or certification in one or more specific applications or processes may be required, depending on job assignment.

Functional Responsibility: Participates in the installation, configuration, and upgrade of computer hardware and software; provides end-user software troubleshooting and support; applies diagnostic techniques to identify problems, investigate causes, and recommend solutions; provides network troubleshooting and support; assists in the administration of e-mail systems; provides phone and help-desk support for local and off-site users.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	1 years
AA/AS	0 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-099H SR Help Desk Technician

Minimum/General Experience: Must have at least three years' directly related experience in Health IT help desk or network support. Also requires thorough knowledge of the principles, methods, and techniques used in network troubleshooting and support as well as modems, data scopes, patch panels, concentrators, associated terminals, and network management software. Knowledge of or certification in one or more specific applications or processes may be required, depending on job assignment.

Functional Responsibility: Performs installation, configuration, and upgrade of computer hardware and software; provides end-user software troubleshooting and support; applies advanced diagnostic techniques to identify problems, investigate causes, and recommend solutions; provides network troubleshooting and support; may participate in the administration and design of websites; participates in the administration of e-mail systems; provides phone and help-desk support for local and off-site users; assists lower level technicians with complex problems.
Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	3 years
AA/AS	1 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-100H Electronics/Electrical Technician

Minimum/General Experience: Requires a minimum of three years' practical experience in the field of electronic repair and installation and experience in module assembly repair and test. Requires in depth knowledge of the principles of electricity, electronics and shop practices and techniques including electrical and electronic circuitry.

Functional Responsibility: Responsible for conducting design, installation, check-out, testing, troubleshooting and repair of electronic equipment. Responsible for the installation, alteration and repair of electrical systems and components. Installations must be accomplished to comply with applicable codes and technical specifications.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	3 years
AA/AS	1 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-106H Logistics Specialist

Minimum/General Experience: Requires three years' experience in the electronics field. Specific experience with electronic hardware is required. Experience with CAD drawing practices and database software is required.

Functional Responsibility: Identifies Configuration Items (CI) and establishes and maintains a

CI baseline inventory database. Conducts periodic audits of DI's to monitor the status of the inventory. Originates and maintains Configuration Management (CM) databases, files and drawings. Maintains spare parts, equipment and consumable inventory databases. Issues supplies and equipment. Maintains statistical analysis of usage.
Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	3 years
AA/AS	1 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-126H JR Graphics Design Specialist

Minimum/General Experience: Must have at least three years' experience of which at least one year is specialized to include developing graphics/artistic presentations for publications and documents (preferably technical documentation). Use of commercial word processing and graphics software programs. Experience with desktop publishing systems is desirable. Must demonstrate the ability to work independently or under only general direction.

Functional Responsibility: Shall support the development of all contract deliverables and reports by developing and updating graphics presentations to improve the quality and enhance the usability of these documents. Shall be responsible for integrating the graphics generated with automated tools and the deliverable documents.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	3 years
AA/AS	1 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-127H Graphics Design Specialist

Minimum/General Experience: Requires at least three years' directly related experience in graphics design. Also requires knowledge of the principles, methods, and techniques used in the preparation of graphics materials and associated software and equipment. Requires experience using graphics software programs.

Functional Responsibility: Participates in the design, layout, and production of brochures, pamphlets, briefings, displays, and other materials; makes recommendations on methods and materials; assist in the creation of overhead presentations, including graphics, charts, photos, and clip-art; creates displays to represent certain accomplishments to be highlighted; creates other graphic materials at client request, including scanned documents, photography, or signs; determines style, size and arrangement of type and illustrations; may participate in the design and creation of videos using computer and video equipment and cameras; may work from rough sketches, engineering drawings or other documentation; may exercise creative judgment by translating needs into graphics capabilities; uses various computer graphics software programs.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	5 years
BA/BS	1 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-131H Videographer/Editor

Minimum/General Experience: Requires no experience.

Functional Responsibility: Sets up and operates video cameras and related audio, lighting and recording equipment used in instructional systems and incorporating interactive video disk technology; performs off-line video editing; advises producer/director regarding shot composition and assists in post production shot selection; accomplishes off-line video narrative, editing, special effects and animation along with quality control of off-line video tape; may develop computer graphics; functions as an on-site team participant under the direction of the producer/director.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	2 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-136H JR Program Management Specialist

Minimum/General Experience: Requires no experience . Requires demonstrated effective organizational skills and knowledge of word processing, spreadsheet, and/or other pertinent software applications.

Functional Responsibility: Responsible for management, performance and completion of routine projects associated with a contract program; collects and evaluates data for monitoring development and life-cycle requirements of various programs and systems; creates program cost estimates to support program

cost/schedule/technique audits or to generate budget submissions; uses computer programs and models to track program data; maintains contact with customer to ensure conformance to customer requirements.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	4 years
AA/AS	2 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-140H JR Program Support Specialist

Minimum/General Experience: Requires no experience and demonstrated administrative and organizational skills. Also requires knowledge of word processing, spreadsheet, and/or other pertinent software applications.

Functional Responsibility: Provides program analytical support for the day-to-day operations as well as long range appraisal and decision processes; acquires, maintains, retrieves and analyzes technical and financial program data using various database programs; interprets, integrates and disseminates large volumes of technical data; assists in generating, processing and monitoring program requirements for activities and documents; coordinates and schedules meetings for management; assists with the preparation of monthly status reports of task accomplishments, financial data, and staffing reports.

Minimum Education: AA/AS

Approved Substitutions	
Education	**Experience**
HS	2 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-141H Program Support Specialist

Minimum/General Experience: Requires at least five years' related administrative experience. Demonstrated administrative and organizational skills. Also requires knowledge of word processing, spreadsheet, and/or other pertinent software applications.

Functional Responsibility: Provides program analytical support for the day-to-day operations as well as long range appraisal and decision processes; acquires, maintains, retrieves and analyzes technical and financial program data using various database programs; applies program knowledge and experience to identify and meet current and future program requirements; interprets, integrates and disseminates large volumes of technical data; generates, processes and monitors program requirements for activities and documents; coordinates and schedules meetings for customers and management; prepares regular status reports of task accomplishments, financial data, and staffing reports; coordinates the preparation of presentation materials and documents.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	9 years
AA/AS	7 years
MA/MS	3 years
Doctorate Degree/Ph.D.	2 years

ANT-142H SR Program Support Specialist

Minimum/General Experience: Requires at least seven years' related administrative experience. Demonstrated administrative and organizational skills. Also requires knowledge of word processing, spreadsheet, and/or other pertinent software applications.

Functional Responsibility: Provides program analytical support for the day-to-day operations as well as long range appraisal and decision processes; acquires, maintains, retrieves and analyzes technical and financial program data using various database programs; applies program knowledge and experience to identify and meet current and future program requirements; interprets, integrates and disseminates large volumes of technical data; generates, processes and monitors program requirements for activities and documents; acts as liaison between management and the customer; coordinates and schedules meetings for customers and management; prepares regular status reports of task accomplishments, financial data, and staffing reports; prepares presentation materials and documents; may provide work leadership to lower level specialists.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	11 years
AA/AS	9 years
MA/MS	5 years
Doctorate Degree/Ph.D.	4 years

ANT-143H JR Admin/Data Analyst

Minimum/General Experience: Requires no experience and also requires knowledge of general administrative and organizational skills and use of associated office equipment.

Functional Responsibility: Responsible for input and verification of data; reviews source documents for accuracy of input data; reviews, follows up and resolves errors during processing cycle; maintains files; reviews and distributes reports.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	0 years
AA/AS	0 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-144H Admin/Data Analyst

Minimum/General Experience: Requires at least two years' related experience. Also requires knowledge of general administrative and organizational skills and use of associated office equipment.

Functional Responsibility: Responsible for input and verification of data; reviews source documents for accuracy of input data; reviews, follows up and resolves errors during processing cycle; may be responsible for integrity of certain database information; investigates questionable data and takes corrective action when necessary; maintains files; generates reports and may analyze specific database information.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	2 years
AA/AS	0 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-147H Documentation Specialist

Minimum/General Experience: Must have two years' experience in composing and producing technical documentation or one year experience in composing and producing technical documentation plus a college degree.

Functional Responsibility: Composes and finalizes technical documentation including specifications, user manuals, etc. in the style, content and format required by the relevant standards using input received from technical personnel.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	2 years
AA/AS	0 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-149H Technical Writer

Minimum/General Experience: Must have three years' experience, of which at least one must be specialized. Specialized experience includes: demonstrated experience in editing documents, including technical documents. Must demonstrate the ability to work independently or under only general direction.

Functional Responsibility: Assist in collection and organizing information required for preparation of user manuals, training materials, installation guides, proposals, and reports. Edit functional descriptions, system specifications, user manuals, special reports, or any other customer deliverables and documents. Assists in performing financial and administrative functions.

Minimum Education: BA/BS

Approved Substitutions	
Education	**Experience**
HS	7 years
AA/AS	5 years
MA/MS	1 years
Doctorate Degree/Ph.D.	0 years

ANT-156H Technical Typist

Minimum/General Experience: Must have at least two years' experience in a technical typing position. At least one year's experience working as a technical typist preparing computer system documentation or documenting developed software requirements.

Functional Responsibility: Prepares draft and final form technical documents. Must be capable of typing at average or above average speed. Must be capable of typing technical narratives and data. Responsible for spelling, grammar, and proper format, and for proofreading finished documents. Must be capable of using various word processing equipment.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	2 years
AA/AS	0 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

ANT-157H Data Entry Clerk

Minimum/General Experience: Must have at least one year's experience in data entry and verification. Typically required to work under close supervision and direction.

Functional Responsibility: Performs data entry via on-line data terminal, key-to-tape, key-to-disk, or similar devices. Verifies data entered, where applicable.

Minimum Education: N/A

Approved Substitutions	
Education	**Experience**
HS	1 years
AA/AS	0 years
BA/BS	0 years
MA/MS	0 years
Doctorate Degree/Ph.D.	0 years

SIN ANCILLARY- Ancillary services rates supporting SIN 54151HEAL Health IT Professional Services

Cat #	Category Name	Contract Year 5 GSA Price with IFF (11/21/18 to 11/20/19)	Contract Year 6 GSA Price with IFF (11/21/19 to 11/20/20)	Contract Year 7 GSA Price with IFF (11/21/20 to 11/20/21)	Contract Year 8 GSA Price with IFF (11/21/21 to 11/20/22)	Contract Year 9 GSA Price with IFF (11/21/22 to 11/20/23)	Contract Year 10 GSA Price with IFF (11/21/23 to 11/20/24)
ANT-044H	Jr. Computer Programmer/Analyst**	$ 64.26	$ 65.64	$ 67.04	$ 68.48	$ 69.94	$ 71.44
ANT-056H	Jr. Computer Systems Analyst**	$ 67.36	$ 68.80	$ 70.27	$ 71.77	$ 73.31	$ 74.88
ANT-072H	System Administrator/Operator**	$ 63.92	$ 65.29	$ 66.69	$ 68.11	$ 69.57	$ 71.06
ANT-073H	Jr. Computer Operator**	$ 46.13	$ 47.11	$ 48.12	$ 49.15	$ 50.20	$ 51.28
ANT-074H	Computer Operator**	$ 51.64	$ 52.75	$ 53.88	$ 55.03	$ 56.21	$ 57.41
ANT-085H	Network/Computer Support Technician**	$ 63.92	$ 65.29	$ 66.69	$ 68.11	$ 69.57	$ 71.06
ANT-086H	Sr. Network/Computer Support Technician**	$ 70.83	$ 72.35	$ 73.89	$ 75.47	$ 77.09	$ 78.74
ANT-091H	Telecommunications Analyst**	$ 76.92	$ 78.56	$ 80.25	$ 81.96	$ 83.72	$ 85.51
ANT-097H	Jr. Help Desk Technician**	$ 57.54	$ 58.77	$ 60.03	$ 61.31	$ 62.62	$ 63.96
ANT-098H	Help Desk Technician**	$ 63.92	$ 65.29	$ 66.69	$ 68.11	$ 69.57	$ 71.06
ANT-099H	Sr. Help Desk Technician**	$ 70.83	$ 72.35	$ 73.89	$ 75.47	$ 77.09	$ 78.74
ANT-100H	Electronics/Electrical Technician**	$ 64.53	$ 65.91	$ 67.32	$ 68.76	$ 70.23	$ 71.74
ANT-106H	Logistics Speciallist**	$ 69.60	$ 71.09	$ 72.61	$ 74.17	$ 75.75	$ 77.37
ANT-126H	Jr. Graphics Design Specialist**	$ 49.94	$ 51.00	$ 52.10	$ 53.21	$ 54.35	$ 55.51
ANT-127H	Graphics Design Specialist**	$ 61.88	$ 63.20	$ 64.55	$ 65.93	$ 67.34	$ 68.79
ANT-131H	Videographer/Editor**	$ 57.71	$ 58.94	$ 60.20	$ 61.49	$ 62.81	$ 64.15
ANT-136H	Jr. Program Management Specialist**	$ 76.58	$ 78.21	$ 79.89	$ 81.60	$ 83.34	$ 85.13
ANT-140H	Jr. Program Support Specialist**	$ 39.60	$ 40.44	$ 41.31	$ 42.19	$ 43.10	$ 44.02
ANT-141H	Program Support Specialist**	$ 45.69	$ 46.67	$ 47.67	$ 48.69	$ 49.73	$ 50.79
ANT-142H	Sr. Program Support Specialist**	$ 76.58	$ 78.21	$ 79.89	$ 81.60	$ 83.34	$ 85.13
ANT-143H	Jr. Admin/Data Analyst**	$ 35.06	$ 35.81	$ 36.58	$ 37.36	$ 38.16	$ 38.98
ANT-144H	Admin/Data Analyst**	$ 38.25	$ 39.07	$ 39.90	$ 40.76	$ 41.63	$ 42.52
ANT-147H	Documentation Specialist**	$ 65.44	$ 66.84	$ 68.27	$ 69.73	$ 71.23	$ 72.75
ANT-149H	Technical Writer**	$ 79.17	$ 80.86	$ 82.59	$ 84.36	$ 86.16	$ 88.01
ANT-156H	Technical Typist**	$ 38.10	$ 38.91	$ 39.75	$ 40.60	$ 41.47	$ 42.35
ANT-157H	Data Entry Clerk**	$ 35.06	$ 35.81	$ 36.58	$ 37.36	$ 38.16	$ 38.98

Overtime: Should overtime be required and authorized, GDIT will invoice the Government at one and one-half Times the task order negotiated labor rates for categories determined to be covered by the SCA (identified ** above).

SCA MATRIX

SCA Matrix			
Cat #	**SCA Eligible contract Labor Category**	**SCA Equivalent Code Title**	**WD Number**
ANT-044	Jr. Computer Programmer/Analyst **	Computer Systems Analyst I - 14101	2015-4281
ANT-056	Jr. Computer Systems Analyst **	Personal Computer Support Technician - 14160	2015-4281
ANT-072	Systems Administrator/Operator **	Computer Operator I - 14041	2015-4281
ANT-073	Jr. Computer Operator **	Computer Operator II - 14042	2015-4281
ANT-074	Computer Operator **	Personal Computer Support Technician - 14160	2015-4281
ANT-085	Network/Computer Support Technician **	Personal Computer Support Technician - 14160	2015-4281
ANT-086	Sr. Network/Computer Support Technician **	Telecommunications Mechanic II - 23932	2015-4281
ANT-091	Telecommunications Analyst **	Personal Computer Support Technician - 14160	2015-4281
ANT-097	Jr. Help Desk Technician **	Personal Computer Support Technician - 14160	2015-4281
ANT-098	Help Desk Technician **	Personal Computer Support Technician - 14160	2015-4281
ANT-099	Sr. Help Desk Technician **	Electronics Technician II, Maintenance - 23182	2015-4281
ANT-100	Electronics/Electrical Technician **	Supply Technician - 01410	2015-4281
ANT-106	Logistics Specialist **	Graphic Artist - 15080	2015-4281
ANT-126	Jr. Graphic Design Specialist **	Graphic Artist - 15080	2015-4281
ANT-127	Graphic Design Specialist **	Photographer III - 13073	2015-4281
ANT-131	Videographer/Editor **	Administrative Assistant - 01020	2015-4281
ANT-136	Jr. Program Mgt Specialist **	General Clerk II - 01112	2015-4281
ANT-140	Jr. Program Support Specialist **	General Clerk III - 01113	2015-4281
ANT-141	Program Support Specialist **	Administrative Assistant - 01020	2015-4281
ANT-142	Sr. Program Support Specialist **	Data Entry Operator I - 01051	2015-4281
ANT-143	Jr. Admin/Data Analyst **	Data Entry Operator II - 01052	2015-4281
ANT-144	Admin/Data Analyst **	Technical Writer II - 30462	2015-4281
ANT-147	Documentation Specialist **	Technical Writer III - 30463	2015-4281
ANT-149	Technical Writer **	Word Processor II - 01612	2015-4281
ANT-156	Technical Typist **	Data Entry Operator II - 01052	2015-4281
ANT-157	Data Entry Clerk **	Data Entry Operator I - 01051	2015-4281

SIN OLM- Order-Level Materials

The use of the Order Level Materials (OLM) SIN is limited to 59 OLM-eligible subcategories under the MAS program. Supplies and/or services provided utilizing OLM authority must be acquired in direct support of an individual task or delivery order that is placed under an OLM-eligible subcategory as identified below:

1) Apparel
2) Audio Visual Products
3) Audio Visual Services
4) Awards
5) Background Investigations
6) Business Administrative Services
7) Compensation and Benefits
8) Document Services
9) Electronic Commerce
10) Environmental Services
11) Facilities Maintenance and Repair
12) Facilities Services
13) Facilities Solutions
14) Financial Services
15) Fire/Rescue/Safety/Environmental Protection Equipment
16) Fitness Solutions.
17) Flags
18) Flooring
19) Fuel Management
20) Furniture Services
21) Healthcare Furniture
22) Household, Dormitory & Quarters Furniture
23) Human Resources
24) Identity Protection Services
25) Industrial Products
26) Industrial Products and Services Maintenance and Repair
27) IT Hardware
28) IT Services
29) IT Software
30) IT Solutions
31) IT Training
32) Language Services
33) Legal Services
34) Logistical Services
35) Machinery and Components
36) Mail Management
37) Marine and Harbor
38) Marketing and Public Relations
39) Medical Equipment
40) Miscellaneous Furniture
41) Musical Instruments
42) Office Furniture
43) Office Management Maintenance and Repair
44) Office Services
45) Packaged Furniture.
46) Printing and Photographic Equipment
47) Protective Equipment
48) Records Management
49) Search and Navigation
50) Security Animals and Related Services
51) Security Services
52) Security Systems
53) Signs
54) Social Services
55) Structures
56) Technical and Engineering Services (non- IT)
57) Telecommunications
58) Testing Equipment
59) Training

NOTE: More information related to the Order Level Materials SIN is available at gsa.gov/mascategoryrequirements