National Geospatial-Intelligence Agency (NGA)

**CIO and IT Services (CIO-T)**



**Open IT Solutions (TII)**

**Task Order (TO): 0003**

**Statement of Work (SOW)**

**13 August 2019**

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# Introduction

This Task Order (TO) will provide Systems Engineering and Integration (SE&I) support for the Open IT Solutions (TII) office within the National Geospatial-Intelligence Agency (NGA) CIO-T directorate as outlined in NGA’s Enterprise Engineering (NEE) Base Statement of Work (SOW) and encompasses the following functional categories:

1. Enterprise and Solutions Architecture Engineering

2. Enterprise Integration Engineering (Cross Organization and Program Offices)

Introduction, background, objectives and scope material contained in the NEE Base SOW are applicable to this TO. The Contractor shall provide all appropriate support to accomplish the requirements stated below.

## Background

Background is provided on each office or program supported by this TO. The mission of TII is to provide Information Technology (IT) infrastructure services, or commonly referred to as Infrastructure Service Provider (ISP) services, for NGA. The office is tasked with the acquisition, oversight, management, integration and execution of IT infrastructure services to meet internal and external customer requirements for NGA. TII is comprised of the Front Office (TII) and divisions according to ISP service lanes:

* User Facing Services (TIIC) manages requirements associated with the desktop environment, desktop software and end user devices, including mobile, that users need to performance their daily activities at their desk, office, conference rooms or classrooms.
* Data Center Services (TIID) manages requirements for storage, compute (physical and virtual), database, and data center local area network (LAN) within data centers and cloud environments.
* Transport Services (TIIN) manages requirements associated with wired and wireless LANs, satellite and terrestrial wide area networks, security devices and cable infrastructure to enable security, reliable and timely transmission of data from one point to another.
* Enterprise Management / Cyber Security Services (TIIS) manages requirements associated with help desk and service center support, cyber, monitoring, auditing, end point security, vulnerability scanning and management, public key infrastructure (PKI), identity and access management (IdAM) and authentication services.
* Desktop Environment (DTE) Integrated Program Office (IPO) (TIIY) coordinates between NGA and the Defense Intelligence Agency (DIA) implementation for the sustainment of DTE services on the Common Operating Environment (COE) domain.

The Integration Division (TIIR) is tasked with integrating new IT infrastructure services into the National System for Geospatial-Intelligence (NSG), and with the adoption and acquisition by NGA of the Intelligence Community (IC) Information Technology Enterprise (ITE) services. TIIR is also tasked with providing oversight, coordination, governance, and configuration management across all IT services and requirements.

## Scope

The Contractor shall perform SE&I and test services in accordance with the requirements specified in this TO. The Contractor shall apply Model-Based System Engineering (MBSE) methods and tools and support the Government with integration efforts across the enterprise. A brief description of the engineering activities to be supported under this TO are as follows:

* **Enterprise and Solutions Architecture Engineering.** The NEE contractor shall provideservices to plan, design, define, develop, document and baseline the GEOINT Enterprise Architecture (GEA), inclusive of Business, Data, Network, Security and Solutions-Level Architectures down to the program level ensuring enterprise systems work together in an integrated fashion to deliver mission capabilities and solutions.
* **Enterprise Integration Engineering (Cross Organization and Program Office).** The NEE contractor shall provide Cross Organization and Program Office integration services to ensure discrete program and project level solutions come together seamlessly to deliver comprehensive mission capabilities.

# Applicable Documents

Applicable documents specified in this section are required for execution of the work described in the TO SOW. These documents provide additional detail to those listed in the Base SOW.

## Compliance Documents

Refer to Base SOW.

## Reference Documents

Refer to Base SOW.

# Description of Work

## 3.1 Enterprise and Solutions Architecture Engineering Support

The Contractor shall provide Enterprise and Solutions Architecture Engineering Support to assist the TII in planning, designing, defining, developing, documenting and baselining the Enterprise IT architecture, inclusive of business, cloud, data center, network and cyber security to ensure Enterprise IT services work together in an integrated fashion to delivery mission capabilities and solutions. Enterprise and Solutions Architecture Engineering Support includes support for, but is not limited to:

* Design solutions-level architecture diagrams that fulfill program requirements and provide solutions that balance cost, schedule and performance across the enterprise.
* Analyze architecture information to provide recommendations for program investments and solution-level architecture and engineering.
* Build, vet, and baseline solutions-level architectures consistent with the enterprise architecture.
* Conduct systems analysis to support re-use or development of like capabilities across the enterprise baseline to gain functional and cost efficiencies. Shall ensure solutions do not duplicate functionality or diverge from NGA business and IT strategies.
* Collaborate with Divisions, Program Offices and Enterprise Integration Engineering (See Section 3.1) to understand program, segment, and project timelines for the delivery of capabilities and to ensure the current architecture baseline and To-Be Architecture supports capabilities when they are delivered.
* Define, develop, document and maintain the time-phased, strategic and technical roadmap(s) that move NGA from the current As-Is Architecture to the To-Be Architecture and current mission capabilities to future mission capabilities.
* Coordinate across all elements of the NGA, NSG, Allied System for Geospatial-Intelligence (ASG), United States Government (USG), commercial and foreign partners’ GEOINT Infrastructure Service Provider (ISP)/Application Service Provider (ASP) response to identify dependencies (on- premise and in the cloud) in support of architectural decisions.
* Coordinate with service providers to integrate changes into the Technical Roadmap.

### Cloud Architecture and Engineering Support

The Contractor shall provide cloud architecture and engineering support for NGA’s cloud environments. Cloud Architecture and Engineering activities the Contractor shall support in the performance of this TO include, but are not limited to:

* Define, develop, recommend, and support cloud migration approaches for entities ensuring optimized cloud architecture(s).
* Facilitates and conducts technical exchange meetings with various Government organizations, contractors, developers, segments, program management offices, customers and stakeholders on migration plans and strategies into cloud environments.
* Update and maintain cloud services and strategic documentation.

### Network Architecture and Engineering Support

The Contractor shall provide network engineering support to reach across the NGA, NSG, ASG, USG, commercial, and foreign partner networks, to include network diagrams and configurations to aid in planning and evolving the NGA, NSG and ASG networks. The Contractor shall provide expertise and support for Network Architecture, design, implementation approaches and recommendations for NGA, NSG, and ASG operations.

### Security Architecture and Engineering Support

The Contractor shall provide security architecture and engineering support for the NGA, NSG, ASG, USG, commercial, and foreign partner networks with direction from the Chief of Security Engineering and in collaboration/coordination with the Cyber Security Operations, Cyber Security Program Office, Security and Installations (SI), and the Chief Information Security Officer (CISO).

Security Architecture and Engineering activities the contractor shall support in the performance of this TO include, but are not limited to:

* Engineer and implement Enterprise Security Services to ensure secure operation and defense of the NGA, NSG, and ASG operations.
* Provide engineering support to current Enterprise Security Services (IDAM, Cross Domain, Network and Host Defense, Cyber Security Operations capabilities) to include integration, upgrades and replacements.
* Providing technical expertise to support program development of secure applications and systems by providing technical guidance for implementation of ICD-503 required controls, speeding the delivery of capabilities to our customers and subsequent future cyber security policies and directives.
* Collaborate with cyber security contractor, operations and accreditation teams on execution of design, engineering, upgrade and integration activities.
* Continuously supports development and refinement of the As-Is and To-Be Security Architecture of the GEA and NGA, SAGE (CAP/SAP), NSG, and ASG in support of NGA Strategy.

## Enterprise Integration Engineering (Cross Organization and Program Offices)

The Contractor shall provide Enterprise Integration Engineering (Cross Organization and Program Office) to assist TII with the systems engineering and integration of program and project solutions that cut across organization boundaries. The Contractor shall work with Program Offices to integrate and synchronize individual program, segment, and project solutions across the enterprise and ensure enterprise epic completion. Enterprise Integration Engineering includes support for, but is not limited to:

* Facilitates and conducts Technical Exchange Meetings (TEM) with various Government organizations, contractors, developers, segments, program management offices, customers and stakeholders on projects and requirements.
* Analyzes, adjudicate and makes recommendations on all TII division-level projects (both where the division is lead and support).
* From project initiations to completion, provides oversight and guidance throughout the systems engineering lifecycle to include requirements definition, architecture analysis, design reviews, testing oversight, and transition into operations
* Assists in the definition, documentation, coordination, acquisition, implementation and closure of projects and requirements.
* Engages with customers and support contractors to monitor cost, schedule and technical performance for all TII division-level projects.
* Supports TII division program manager at requirements boards, engineering review boards, program management reviews and forums.
* Assists in the development of documents, packages or presentations for these boards, reviews and forums.
* Develop, produce, and maintain effective metrics of TII project execution.
* Provides analysis and recommendations to the TII project manager.

### Desktop Environment (DTE) Integrated Program Office (IPO)

The Contractor shall support the DTE IPO by providing integration and engineering support to facilitate the following functions in coordination with the Defense Intelligence Agency (DIA) and NGA implementation teams:

* Ensure the continued lifecycle management support for the sustainment of DTE services on the Common Operating Environment (COE) domain.
* Develop the roadmap, requirements, and associated implementation plans to stabilize the environment.
* Support DIA’s and NGA’s development of the implementation plan to demonstrate compliance with the ODNI-defined architecture and associated standards.
* Provide technical and management oversight of the implementation of the approved plans.

## Transition

### Transition Plan

As part of the transition, the Contractor shall provide a staffing plan detailing the onboarding of all personnel identified in Appendix A. The plan shall describe the Contractor employee names, company, clearance information, polygraph information, and dates of submittal into the NGA eNomination system (e-Nom).

The Contractor shall comply with the guidance in the table below.

**Table 1:Transition Availability**

| **Calendar Days After Award** | **Contractor Personnel** |
| --- | --- |
| 7 Days & 14 Days | * All Key Personnel eNomination Requests (eNom) submitted (within 7 days) and available for task order performance (within 14 days). |
| 15 Days | * At least 25% of all staff eNom submitted and available for task order performance. |
| 30 Days | * At least 50% of all staff eNom submitted and available for task order performance. |
| 45 Days | * At least 75% of all staff eNom submitted and available for task order performance. |
| 60 Days | * 100% of all staff eNom submitted and available for task order performance. |

3.3.1.1 Security Onboarding

The Contractor’s key personnel and any other personnel requiring access to classified systems shall have active Top Secret and be Sensitive Compartmented Information (TS/SCI) eligible at contract award.

To minimize the risk of a delay in supporting transition startup, the Contractor’s Security Office shall use the NGA eNomination system to nominate employees for personnel security clearances, facility badges, and system access. Upon security clearance approval, the Contractor shall schedule their personnel for clearance briefing and badges with the appropriate office(s) at NGA.

3.3.1.2 Sensitive Compartmented Information Facility (SCIF)

Any SCIF(s) that will be utilized to perform SCI work at contract sites must be coordinated with the Contracting Officer (CO) and NGA Physical Security Team 7 days after award to ensure NGA authorization and accreditation is granted for NEE work to be performed in the Contractor SCIF. Note: All SCI work performed at a Contractor site must be performed in either an NGA accredited Sensitive Compartmented Information Facility (SCIF) or an Other Government Agency (OGA) SCIF that has either a Memorandum of Agreement (MOA), Memorandum of Understanding (MOU), Joint Use Agreement or Co-Use Agreement with NGA for this effort.

### Transition Closeout

The Contractor shall support transition to another Contractor as directed by the Government (commencing 30 Days before the end of the contract). The Contractor shall review and transition knowledge and relevant information concerning enterprise engineering, architecture, and integration and standard operating procedures. The Contractor shall provide at a minimum the following items by the end of the contract in accordance with Government direction:

* Hardware and software development documentation that provides a comprehensive detailed description of the current operational baseline for each security domain. The documentation will at a minimum, contain the following: systems architecture, CM, software configuration, COTS integration, and capture of the hardware and software architectures.
* Operating system and application software with annotated source code for each security domain, including software under current development or test that is yet to be deployed. The Contractor shall provide the software in an industry standard format such as Microsoft TFS.
* Operational system data and database information, both current and historical, including user account data, metadata catalogs, stored imagery and products, system diagrams, and knowledge bases.

The Contractor shall conduct an organized transfer of Government-furnished information (GFI), to include manufacturer maintenance agreements and software licenses as directed by the CO. The Contractor shall generate a report containing the final disposition of all NGA property.

## Deliverables

The following sub-sections describe each of the Contract Data Requirements List (CDRL) documents required in support of this contract. A brief summary of these CDRLs is also shown in table form in the CDRL Matrix of this document.

### Kick-Off Meeting

The contractor shall schedule a kick-off meeting with the CO, Program Manager (PM) and Contracting Officer’s Representative (COR) and Technical Monitor (TM) within 10 calendar days of task order award.

### Weekly Meetings

A weekly telecom will be held with the CO, PM, and COR to discuss status. The weekly telecoms will be held throughout the entire performance. The Contractor shall provide an agenda, identify any issues, and document action items.

### Quarterly Reviews

The contractor shall conduct Quarterly Program Management Reviews (PMR) of the data generated in preparation of the Status Report to address monthly data and other pertinent management information. The review shall include Government requested information and shall include, but is not limited to:

1. Contract management reporting
2. Task progress and Funding Status Report
3. Control of the contractual TO (dollars and labor hours) and distribution
4. Projected changes in manpower and redistribution based on customer organization needs, manpower and recruiting summary
5. Security issues
6. Contractual action items
7. TO accounting data documentation
8. Report by TO element of hours/rates by discipline and skill level and by job title
9. Comparison of proposed travel costs to actual travel costs for each TO element
10. Comparison of total contract funding to invoiced services
11. Any special interest items requested by the Government or provided at the contractor’s initiative
12. TO Requirements Review (as needed)

These reviews may also address, in general, the efforts, challenges, problems, and accomplishments of Contractor personnel in the respective task areas. The Contractor shall provide the PMR agenda and briefing slides three (3) business days prior to the meeting and PMR minutes within five (5) calendar days following the meeting. Government program and contract management may require other compilations of data to ensure adequate insight into the TO execution. This review shall be held with the Program Management Office (PMO), CO and TO COR.

### Monthly Financial Report (MFR)

The Contractor shall provide a Monthly Financial Report (MFR) that summarizes all financial activity on the TO. The report shall track and report the following for each position by CLIN: Position ID, Name, Job Title, Skill Level, Location, Labor Rate, Monthly and Cumulative Hours Charged, Monthly and Cumulative Invoiced, and Total Price for the Prime Contractor and all Subcontractors. The report shall also include a breakout of any Other Direct Costs (ODC) for travel by the Prime Contractor and all Subcontractors.

### Monthly Staffing Report (MSR)

As part of the Monthly Staffing Report (MSR), the contractor shall provide one (1) electronic softcopy of an updated staffing report. The MSR supports the tracking of the Contractor’s proposed personnel (i.e., designated position number or identifier, Prime/Subcontractor, name, job title, start/end date, office, geographical location, and other fields of information as may be determined at a later date). A template for the MSR will be provided.

### Monthly Activity Report (MAR)

The Contractor shall submit a technical Monthly Activity Report (MAR) to the COR no later than the 15th of each month.

### Technical Exchange Meetings (TEM)

The contractor shall schedule and support Technical Exchange Meetings (TEM) to collaborate and coordinate technical planning. The Contractor shall record and submit minutes from the meetings.

### CDRL Matrix

The CDRL Matrix shown in the table below is a list of all Contractor-provided deliverables that shall be met throughout the contract. All deliverables will be submitted in formats compatible with Adobe or Microsoft Office products. Softcopy delivery (via e-mail, etc.) is the preferred method of exchange for electronic copies. Deliveries will be made to the PM, CO, COR and/or Alternate COR (ACOR) as specified in the table below.

Table 2: CDRL Matrix

| **CDRL Title** | **CDRL #** | **SOW Section** | **First Submission** | **Updates** | **Delivered to** | **Format and number of deliverables** |
| --- | --- | --- | --- | --- | --- | --- |
| Quarterly Program Management Reviews | 001 | 3.4.3 | Award +120 Days | Quarterly | PM/CO/COR | 1 Electronic Copy to PMO Email Address Contractor Defined, Government Approved |
| Monthly Financial Report | 002 | 3.4.4 | Award +30 Days | Monthly | COR/TM | 1 Electronic Copy to PMO Email Address  Contractor Defined, Government Approved |
| Monthly Staffing Report | 003 | 3.4.5 | Award +30 Days | Monthly | COR/TM | 1 Electronic Copy to PMO Email Address  Government Defined |
| Monthly Activity Report | 004 | 3.4.7 | Award +30 Days | Monthly | COR/TM | 1 Electronic Copy to appropriate TM Email Address(es) Contractor Defined, Government Approved |
| Trip Reports | 005 | 7.0 | NLT 10 business days after return | As Required | COR/TM | 1 Electronic Copy to PMO Email Address and to appropriate TM Email Address(es)  Contractor Defined, Government Approved |
| Transition Plan | 006 | 3.3.1 | Award + 7 days | As Required | PM/CO/COR | 1 Electronic Copy to PMO Email Address  Contractor Defined, Government Approved |
| Reports, Briefings, Evaluations, Technical Assignments, Transition Plan,  Minutes, White Papers Etc. | 007 | 3.0 | As Required | As Required | COR, TM | 1 Electronic Copy to PMO Email Address, or applicable Technical Monitor  Contractor Defined, Government Approved |

## Labor

Refer to Appendices A and B for the required positions, overall description of work, duties, skills and experience.

# General Provisions

## Primary Place of Performance

The primary place(s) of performance for this Task Order are NCE, NCW, Defense Intelligence Agency (DIA) in Reston, VA and the Washington Metropolitan Area (WMA) (Contractor’s facility). Position 0003 shall by performed at CENTCOM in Tampa, FL. Other work locations will be considered if conducive to the effective performance of work. Possible examples of justified alternative work locations include primary locations of corporate SCIF, Lab or test/demonstration facilities. The Contractor shall receive prior written approval for the alternative work location from the COR.

See Appendix A for the specific locations of the required job titles.

## Government Furnished Property (GFP)

The Government will provide the following GFP for Task Order 0003:

**Hardware:** Hardware will be provided by the Government. For Contractors located at the Government site (on-site), this includes access to thin client COE and SBU networks; unclassified and classified VoIP phones, and printers.

For Contractors located at the Contractor-provided site (off-site), this includes (at a minimum): High side/classified/COE: thin clients, monitors, VoIP phones, printers, plotters and VTCs.  Note for Contractors located at the Contractor-provided site (off-site): This does NOT include unclassified equipment (phones, computers, etc.). The costs associated with these needs are the responsibility of the Contractor.

**Tools/Software:** Any tools/software required by the Contractor, not currently identified will have to go through the NGA Software Whitelist Assurance Process (SWAP) for approval prior to being placed on any NGA systems. The Contractor will be expected to use the provided tools/software to execute the TO 0003 SOW requirements until such time any new tools/software are approved and available for operational use on NGA systems.

For both on-site and off-site, the Government will provide a standard profile of Office productivity tools that includes Microsoft Office, Adobe Reader and 7-Zip file manager.

**Data:** The Government will provide access to all available NGA data to support the requirements of the Task Order 0003 SOW.

**Access:** The Government will facilitate access to Government facilities (to include badges) provided that the need for the access is validated and the security requirements of the contract are met. If other personnel security accesses are required, the Government will provide the sponsorship for additional accesses. The Government will provide access to information and data, relative to the tasks required to include sponsoring classified network connectivity.

## Foreign Contacts

Refer to the Base SOW.

# Security

Refer to the Base SOW.

# Key Personnel

N/A

# Travel and Other Direct Costs (ODCs)

Refer to the Base SOW section 9.3 and Section H.4 in the Base contract. Travel is NTE $80K per year.

**Table 3: Anticipated Travel Requirements**

|  |  |  |  |
| --- | --- | --- | --- |
| **# of Trips** | **From** | **To** | **# Days Per Trip** |
| 6 | Washington Metro Area | St. Louis, MO | 5 |
| 2 | St. Louis, MO | Washington Metro Area | 5 |
| 10 | Washington Metro Area | St. Louis, MO | 4 |
| 14 | St. Louis, MO | Washington Metro Area | 4 |
| 6 | Washington Metro Area | St. Louis, MO | 2 |
| 6 | St. Louis, MO | Washington Metro Area | 2 |
| 2 | CONUS | Washington Metro Area | 4 |
| 2 | CONUS | St. Louis, MO | 4 |
|  |  |  |  |

# Appendix A: Anticipated Support Requirements

The requirements needed to adequately support TO 0003 are listed in the table below. Position description information for Government-defined labor is provided in Appendix B. The location column indicates the primary work location for the Contractor personnel.

**Government Defined**

| **Position ID** | **Position Number** | **Division** | **Location** | **Position Description  #** | **TO Section** | **FTE** | **Skill Level** | **Service Category** | **Job Title** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| TO-03-TII-01-0001 | 0001 | TII | WMA (Contractor Facility) | 1 | 3.1, 3.2, 3.3, 3.4, 3.5 | 1 | 4 – Expert | Senior Management | Program Manager (Expert) |
| TO-03-TII-02-0002 | 0002 | TII | NCE | 2 | 3.1, 3.2, 3.3 | 1 | 4 - Expert | Senior Management | Lead Integrator (Expert) |
| TO-03-TIIC-01-0003 | 0003 | TIIC | CENTCOM | 3 | 3.2.2 | 1 | 4 - Expert | Engineering and Architecture | Systems Engineer (Expert) |
| TO-03-TIIC-02-0004 | 0004 | TIIC | NCW - STL | 3 | 3.2.2 | 1 | 4 - Expert | Engineering and Architecture | Systems Engineer (Expert) |
| TO-03-TIIC-03-0005 | 0005 | TIIC | NCE | 3 | 3.2.2 | 1 | 4 - Expert | Engineering and Architecture | Systems Engineer (Expert) |
| TO-03-TIIC-04-0006 | 0006 | TIIC | NCE | 3 | 3.2.2 | 1 | 4 - Expert | Engineering and Architecture | Systems Engineer (Expert) |
| TO-03-TIID-01-0007 | 0007 | TIID | NCE | 9 | 3.1.2 | 1 | 4 - Expert | Engineering and Architecture | Cloud Architect (Expert) |
| TO-03-TIID-02-0008 | 0008 | TIID | NCW - STL | 10 | 3.1.2 | 1 | 3 - Senior | Engineering and Architecture | Cloud Engineer (Senior) |
| TO-03-TIID-03-0009 | 0009 | TIID | NCE | 11 | 3.1.2 | 1 | 2 - Mid | Engineering and Architecture | Cloud Engineer (Mid) |
| TO-03-TIID-04-0010 | 0010 | TIID | NCW - STL | 11 | 3.1.2 | 1 | 2 - Mid | Engineering and Architecture | Cloud Engineer (Mid) |
| TO-03-TIID-05-0011 | 0011 | TIID | NCE | 11 | 3.1.2 | 1 | 2 - Mid | Engineering and Architecture | Cloud Engineer (Mid) |
| TO-03-TIID-06-00012 | 0012 | TIID | NCE | 12 | 3.1.2 | 1 | 1 - Junior | Engineering and Architecture | Cloud Engineer (Junior) |
| TO-03-TIID-07-0013 | 0013 | TIID | NCW - STL | 5 | 3.2.3 | 1 | 2 - Mid | Engineering and Architecture | Systems Engineer (Mid) |
| TO-03-TIID-08-0014 | 0014 | TIID | NCE | 15 | 3.2.3 | 1 | 2 - Mid | Engineering and Architecture | Systems Integrator (Mid) |
| TO-03-TIID-09-0015 | 0015 | TIID | NCW - STL | 14 | 3.2.3 | 1 | 3 – Senior | Engineering and Architecture | Systems Integrator (Senior) |
| TO-03-TIID-10-0016 | 0016 | TIID | NCW - STL | 4 | 3.2.3 | 1 | 2 - Mid | Engineering and Architecture | Systems Engineer (Senior) |
| TO-03-TIIN-01-0017 | 0017 | TIIN | NCW - STL | 7 | 3.1.3 | 1 | 4 - Expert | Engineering and Architecture | Network Systems Engineer (Expert) |
| TO-03-TIIN-02-0018 | 0018 | TIIN | NCE | 7 | 3.1.3 | 1 | 4 - Expert | Engineering and Architecture | Network Systems Engineer (Expert) |
| TO-03-TIIS-01-0019 | 0019 | TIIS | NCE | 2 | 3.2.4 | 1 | 4 – Expert | Senior Management | Lead Integrator (Expert) |
| TO-03-TIIS-02-0020 | 0020 | TIIS | NCE | 8 | 3.1.4 | 1 | 4 – Expert | Engineering and Architecture | Cyber Security Engineer (Expert) |
| TO-03-TIIS-03-0021 | 0021 | TIIS | NCE | 3 | 3.1.4 | 1 | 4 – Expert | Engineering and Architecture | System Engineer (Expert) |
| TO-03-TIIS-04-0022 | 0022 | TIIS | NCW - STL | 10 | 3.1.4 | 1 | 3 - Senior | Engineering and Architecture | Cloud Engineer (Senior) |
| TO-03-TIIS-05-0023 | 0023 | TIIS | NCW - STL | 8 | 3.1.4 | 1 | 4 – Expert | Engineering and Architecture | Cyber Security Engineer (Expert) |
| TO-03-TIIY-01-0024 | 0024 | TIIY | DIA Reston | 2 | 3.2.5 | 1 | 4 – Expert | Senior Management | Lead Integrator (Expert) |
| TO-03-TIIY-02-0025 | 0025 | TIIY | DIA Reston | 14 | 3.2.5 | 1 | 3 -Senior | Engineering and Architecture | System Integrator (Senior) |
| TO-03-TIIY-03-0026 | 0026 | TIIY | DIA Reston | 14 | 3.2.5 | 1 | 3 – Senior | Engineering and Architecture | System Integrator (Senior) |
| TO-03-TIIY-04-0027 | 0027 | TIIY | DIA Reston | 3 | 3.2.5 | 1 | 4 - Expert | Engineering and Architecture | System Engineer (Expert) |
| TO-03-TIIY-05-0028 | 0028 | TIIY | DIA Reston | 4 | 3.2.5 | 1 | 3 – Senior | Engineering and Architecture | System Engineer (Senior) |
| TO-03-TIIY-06-0029 | 0029 | TIIY | DIA Reston | 14 | 3.2.5 | 1 | 3 – Senior | Engineering and Architecture | System Integrator (Senior) |
| TO-03-TIIY-07-0030 | 0030 | TIIY | DIA Reston | 6 | 3.2.5 | 1 | 3 – Senior | Engineering and Architecture | Test Systems Engineer (Senior) |
| TO-03-TIIY-08-0031 | 0031 | TIIY | DIA Reston | 14 | 3.2.5 | 1 | 3 – Senior | Engineering and Architecture | System Integrator (Senior) |
| TO-03-TIIY-09-0032 | 0032 | TIIY | DIA Reston | 8 | 3.2.5 | 1 | 4 - Expert | Engineering and Architecture | Cyber Security Engineer (Expert) |
| TO-03-TIIR-01-0033 | 0033 | TIIR | NCW - STL | 2 | 3.2.1 | 1 | 4 - Expert | Senior Management | Lead Integrator (Expert) |
| TO-03-TIIR-02-0034 | 0034 | TIIR | NCW - ARN | 4 | 3.2.1 | 1 | 3 - Senior | Engineering and Architecture | Systems Engineer (Senior) |
| TO-03-TIIR-03-0035 | 0035 | TIIR | NCW - STL | 5 | 3.2.1 | 1 | 2 - Mid | Engineering and Architecture | Systems Engineer (Mid) |
| TO-03-TIIR-04-0036 | 0036 | TIIR | NCW - ARN | 16 | 3.2.1 | 1 | 3 - Senior | Engineering and Architecture | Integration Engineer (Senior) |
| TO-03-TIIR-05-0037 | 0037 | TIIR | NCW - STL | 3 | 3.2.1 | 1 | 4 - Expert | Engineering and Architecture | System Engineer (Expert) |
| TO-03-TIIR-06-0038 | 0038 | TIIR | NCW - STL | 14 | 3.2.1 | 1 | 3 - Senior | Engineering and Architecture | Systems Integrator (Senior) |
| TO-03-TIIR-07-0039 | 0039 | TIIR | NCW - STL | 4 | 3.2.1 | 1 | 3 - Senior | Engineering and Architecture | Systems Engineer (Senior) |

**Appendix A Key:**

AA-12-BBBB-34-5678 (First two Columns of Table)

|  |  |
| --- | --- |
| **Characters** | **Description** |
| AA | Task Order |
| 12 | Task Order Number |
| BBBB | Organization Code Position Supports |
| 34 | Organizational Code Number |
| 5678 | Position Number |

Skill level definitions for each service category are defined as follows. While the experience requirements for each level are the same across each service category, the associated labor rates may not be. Unless otherwise stated in Appendix B, default to the table below anytime the word “experience” is used in a position description to verify the number of years required.

|  |  |
| --- | --- |
| **Skill Level** | **Total Experience** (in years) |
| 4 - Expert | 18+ |
| 3 - Senior | 12+ to 18 |
| 2 - Mid | 6+ to 12 |
| 1 - Junior | 0 to 6 |

Experience may be substituted for academic degrees on a case-by-case basis with approval by the Contracting Officer and Contracting Officer’s Representative (COR).

These lists of job titles should be considered a sample and are not all inclusive.

**Senior Management**

Sample job titles may include, but are not limited to: Program Manager, Technical Lead Integrator, Business Process Manager, Functional Specialist Advisor

**Engineering and Architecture**

Sample job titles may include, but are not limited to: Integration Engineer, Software Engineer, Enterprise Architect, Data Architect, Data Scientist, Data Modeler, Cyber Security Engineer, Systems Analyst, Systems Architect, Systems Engineer, Systems Integrator, Network Systems Engineer, Cloud Architect, Cloud Engineer, Human System Integrator

**IT Engineering**

Sample job titles may include, but are not limited to: Computer Programmer, Tech Writer, Software Quality Assurance Specialist

**Administration**

Sample job titles may include, but are not limited to: Database Administrator, Web Administrator

Appendix B: Position Descriptions Table

|  |  |  |  |
| --- | --- | --- | --- |
| **Position Description #** | **Job Title** | **Position Description #** | **Job Title** |
| 1 | Program Manager (Expert) | 9 | Cloud Architect (Expert) |
| 2 | Lead Integrator (Expert) | 10 | Cloud Engineer (Senior) |
| 3 | Systems Engineer (Expert) | 11 | Cloud Engineer (Mid) |
| 4 | Systems Engineer (Senior) | 12 | Cloud Engineer (Junior) |
| 5 | Systems Engineer (Mid) | 13 | Systems Integrator (Expert) |
| 6 | Test Systems Engineer (Senior) | 14 | Systems Integrator (Senior) |
| 7 | Network Systems Engineer (Expert) | 15 | Systems Integrator (Mid) |
| 8 | Cyber Security Engineer (Expert) | 16 | Integration Engineer (Senior) |

# Appendix B: Position Descriptions

**Position 1**: **Program Manager (Expert)**

**Overall Assignment Description:**

The Expert Program Manager (PM) is responsible for ensuring the successful contractual and programmatic execution of the Task Order (TO) and serves as the authoritative point of contact for the Vendor on all TO performance matters. The PM interfaces with the NSES PMO and TO Government Leads to ensure all positions are staffed and/or backfilled quickly with qualified personnel in accordance with the specified TO Position Descriptions. The PM is responsible for ensuring work deliverables, resolving performance shortfalls or deficiencies, supervising contractor personnel and communicating overarching Government objectives and goals for the Task Order to the contractor team. The PM works with the TO Lead Integrators, Business Process Manager, and all Critical Staff (critical staffing positions) as well as the Government TO Leads to plan and orchestrate work activities for coordinated deliveries and comprehensive solutions. The PM provides technical expertise and assistance to the Government on programmatic matters related to lifecycle engineering and industry best program management practices to achieve NGA’s GEOINT mission.

**Duties may include:**

* Provide Contract Management support to the NSES PMO to ensure the timely execution of all financial, staffing and administrative contract actions.
* Provide program management support to Government TO Leads to facilitate the technical execution of the TO. Program Management support includes cost, schedule, risk and performance management of all TO staff and work activities.
* Work with Government TO Leads to ensure contractor personnel are qualified to perform the assigned task, tasks are understood and completed within the specified timelines, and potential personnel problems are pre-empted.
* Consult and coordinate with the NSES PMO and appropriate Government TO Leads for new resource requirements and associated cost estimates resulting from technical work scope adjustments.
* In coordination with the NSES PMO and Government TO Leads, establish and implement streamlined processes and procedures enabling the rapid respond to surge requirements for increased contract personnel.
* Pre-coordinate all travel and training with the NSES PMO and Government TO Leads prior to scheduling.
* Ensure programmatic alignment and adherence to the NGA Vision, Planning and Programs, CIOT Priorities and TA Priorities.
* Ensure the accuracy, quality, configuration management and timely delivery of all required TO deliverables to include the Monthly Financial Report, Monthly Staffing Report, Monthly Activity Report, Quarterly Program Management Review materials, and as required Trip Reports, Briefings, Evaluations, Technical Assignments, White Papers or other Government requested deliverables necessary for the successful execution and/or completion of work activities.
* Plan and execute Quarterly Program Reviews to provide the NSES PMO and Government TO Leads a comprehensive understanding of the health/status of all TO activities.
* Support the coordination of program management activities between the TA Engineering Offices and Divisions, CIOT Groups, and NGA Directorates and Associate Directorates.
* Support NGA and IC Steering Groups, Advisory Groups and Governance Boards as required.
* Provide program management expertise in lean six-sigma strategies and execution and agile methods, practices and execution.
* Perform day-to-day contractual and programmatic management of the TO.

**Skills and Experience:**

Required:

* Master’s degree in Engineering, Computer Science, Information Technology, Management Information Systems, or related STEM degree program.
* Expert experience as a Program Manager in terms of cost, schedule, performance, and risk management.
* Experience in engineering, design and analysis of IT or related systems experience in all phases of design, development, analysis and documentation, and development of standards and guidelines for tasks being performed.
* Expert-level working experience in government or industry in DoD/IC Acquisition Process or PPBES.
* Project Management Professional (PMP), DAWIA Level III certification in Program Management or equivalent specialized experience with Project Management tools and techniques.

Desired:

* Knowledge of the geospatial intelligence mission and its contributions to the Intelligence Community.
* Working knowledge of Model Based Systems Engineering, processes, tools and languages.
* Experience with the development and/or review of cost estimates and the associated technical work scope necessary to achieve stated objectives.
* Experience in lean six-sigma.
* Experience in tailoring and using both Agile and Waterfall development methodologies
* Experience with the identification of technical issues and proactive communication of possible impacts.
* Experience in performing validation and verification of various engineering results and deliverables to ensure the highest quality results against customer requirements.
* Working knowledge of Cloud-based technologies.
* Working knowledge of structured and unstructured Big Data.
* Working knowledge of Automation, Augmentation and Artificial Intelligence technologies.
* Experience with and strong understanding of systems engineering lifecycle.

**Position 2**: **Lead Integrator (Expert)**

**Overall Assignment Description:**

Expert Lead Integrator provides integration support to the Government and coordinates contract engineering activities across organizational boundaries for system/capability development or modification efforts. They lead enterprise planning of engineering and integration activities and perform issue resolution. The Lead Integrator works directly with Government Office/Division Chiefs to prioritize work assignments and align the necessary resources to execute tasks.

**Duties include:**

* Assists Government Office/Division Chiefs in assessing, documenting, and tracking new engineering requirements and facilitating technical exchange meetings (TEMs) used to inform Government and Contractor teams about systems engineering and integration activities.
* Supports the Government in resource planning, coordination and analysis.
* Coordinates project schedules to support defined strategic effectivities.
* Plans major systems engineering Program Reviews and Control Gate Reviews including scheduling of meetings and preparation of briefings/presentations.
* Assists in the preparation of documents, records, forms, reports, and plans covering systems engineering and integration activities.
* Provide change management oversight, to plan resource alignment, identify priority adjustments, and identify needed skillsets.

**Skills and Experience:**

Required:

* Masters’ degree in Engineering, Computer Science, Information Technology, Management Information Systems, or related STEM degree program.
* Expert experience in engineering, design and analysis of IT or related systems experience in all phases of design, development, analysis and documentation, and development of standards and guidelines for tasks being performed.
* Expert-level working experience in government or industry in DoD/IC Acquisition Process or PPBES.

Desired:

* Working knowledge of Model Based Systems Engineering, processes, tools and languages.
* Software Development Framework certification.
* Experience Integrating solutions using Cloud-based technologies.
* Experience Integrating solutions using structured and unstructured Big Data.
* Experience Integrating solutions using Automation, Augmentation and Artificial Intelligence technologies.
* Experience with and strong understanding of systems engineering lifecycle.

**Position 3: Systems Engineer (Expert)**

**Overall Assignment Description:**

Expert Systems Engineers assist in leading engineering teams in taking a multi-discipline approach to requirements engineering, solutions engineering, scheduling, reliability, resiliency, services development, integration, test and evaluation, maintainability and analysis across the National System of Geospatial-intelligence (NSG), Allied System of Geospatial-intelligence (ASG) and Federal Agencies to ensure timely and accurate GEOINT.

**Duties include:**

* Assists the Government in directing requirements engineering, solutions engineering, scheduling, reliability, resiliency, services development, integration, test and evaluation, maintainability and analysis across the National System of Geospatial-intelligence (NSG), Allied System of Geospatial-intelligence (ASG) and Federal Agencies.
* Assists with the planning, analysis/traceability of user requirements, architectures traceability, procedures, and problems to automate or improve existing systems and review cloud service capabilities, workflow, and scheduling limitations.
* Advises the Government on proposed changes to the solutions designs based on analysis of requirements and new technology.
* Assists the Government in the capture and translation of mission and customer requirements/needs into systems/capability requirements and solutions.
* Supports the analyses and allocation of requirements to systems architecture components and executing programs.
* Assists the Government in performing systems integration activities.
* Assist in leading Analysis of Alternatives (AoAs), Course of Actions (CoAs), Trade Studies, and Engineering Assessments.
* Assists the Government in strategic technical planning, project management, performance engineering, risk management and interface design.
* Provides expert advice to the Government in the areas of relating vision, strategy, plans, needs, requirements, and process and capability developments.
* Operates at the level of integrating multiple Major Systems Acquisitions across organizational, agency, department, and governmental/national boundaries.
* Demonstrated knowledge of the current NSG/ASG and NRO enterprises.
* Oversees and coordinates the work of Senior-, Mid-, and Junior-level contractor Systems Engineers.

**Skills and Experience:**

Required:

* Master’s degree in Systems Engineering or in related technical or scientific fields such as engineering, physics, mathematics, operations research, engineering management, Computer Science, Information Technology, Management Information Systems, or related STEM degree program.
* Expert working experience in government or industry in relevant work areas including: DoD/IC Acquisition Process, Requirements Process, PPBES Process or system engineering of large complex System of Systems or Service Oriented Architecture/Cloud environments.
* Experience with and strong understanding of systems engineering lifecycle.

Desired:

* Doctorate in Systems Engineering or in related technical or scientific fields such as engineering, physics, mathematics, operations research, engineering management, Computer Science, Information Technology, Management Information Systems, or related STEM degree program.
* Working knowledge of Model Based Systems Engineering, processes, tools and languages.
* Software Development Framework certification.
* Licensure as a professional engineer.
* Membership or leadership participation in any of the following professional organizations:
  + ACSM
  + ASCE
  + ASPRS
  + OGC
  + SAREM
  + USGIF
* Extensive work experience in the field of geospatial intelligence.
* Experience engineering solutions using Cloud-based technologies.
* Experience engineering solutions using structured and unstructured Big Data.
* Experience engineering solutions using Automation, Augmentation and Artificial Intelligence technologies.
* Demonstrated expertise in photogrammetry, remote sensing, image science, information sciences, geographic information systems, geomatics, or related fields.

**Position 4: Systems Engineer (Senior-Level)**

**Overall Assignment Description:**

Senior-level Systems Engineers guide engineering teams in taking a multi-discipline approach to requirements engineering, solutions engineering, scheduling, reliability, resiliency, services development, integration, test and evaluation, maintainability and analysis across the National System of Geospatial-intelligence (NSG), Allied System of Geospatial-intelligence (ASG) and Federal Agencies to ensure timely and accurate GEOINT.

**Duties include:**

* Guides Mid-level and Junior-level system engineers performing requirements engineering, solutions engineering, scheduling, reliability, resiliency, services development, integration, test and evaluation, maintainability and analysis across the National System of Geospatial-intelligence (NSG), Allied System of Geospatial-intelligence (ASG) and Federal Agencies.
* Guides the planning, analysis/traceability of user requirements, architectures traceability, procedures, and problems to automate or improve existing systems and review cloud service capabilities, workflow, and scheduling limitations.
* Guides Mid-level and Junior-level system engineers developing solutions designs based on analysis of requirements and new technology.
* Assists the Government in the capture and translation of mission and customer requirements/needs into systems/capability requirements and solutions.
* Supports the analyses and allocation of requirements to systems architecture components and executing programs.
* Assists the Government in performing systems integration activities.
* Conducts Analysis of Alternatives (AoAs), Course of Actions (CoAs), Trade Studies, and Engineering Assessments.
* Assists the Government in strategic technical planning, project management, performance engineering, risk management and interface design.
* Operates at the level of integrating multiple systems, services, processes, and interfaces within a Major Systems Acquisitions across organizational and agency boundaries

**Skills and Experience:**

Required:

* Bachelor’s degree in Systems Engineering or in related technical or scientific fields such as engineering, physics, mathematics, operations research, engineering management, Computer Science, Information Technology, Management Information Systems, or related STEM degree program.
* Senior-level working experience in government or industry in relevant work areas including: DoD/IC Acquisition Process, Requirements Process, PPBES Process or system engineering of large complex System of Systems or Service Oriented Architecture/Cloud environments.
* Experience with and strong understanding of systems engineering lifecycle.

Desired:

* Master’s degree in Systems Engineering or in related technical or scientific fields such as engineering, physics, mathematics, operations research, engineering management, Computer Science, Information Technology, Management Information Systems, or related STEM degree program.
* Working knowledge of Model Based Systems Engineering, processes, tools and languages.
* Working knowledge of Software Development Frameworks.
* Documented work experience in the field of geospatial intelligence.
* Licensure as a professional engineer.
* Membership or leadership participation in any of the following professional organizations:
  + ACSM
  + ASCE
  + ASPRS
  + OGC
  + SAREM
  + USGIF
* Demonstrated expertise in photogrammetry, remote sensing, image science, information sciences, geographic information systems, geomatics, or related fields.
* Demonstrated knowledge of the current NSG/ASG and NRO enterprises.

**Position 5: Systems Engineer (Mid-Level)**

**Overall Assignment Description:**

Mid-level Systems Engineers employ a multi-discipline approach to requirements engineering, solutions engineering, scheduling, reliability, resiliency, services development, integration, test and evaluation, maintainability and analysis across the National System of Geospatial-intelligence (NSG), Allied System of Geospatial-intelligence (ASG) and Federal Agencies to ensure timely and accurate GEOINT.

**Duties include:**

* Conducts requirements engineering, solutions engineering, scheduling, reliability, resiliency, services development, integration, test and evaluation, maintainability and analysis across the National System of Geospatial-intelligence (NSG), Allied System of Geospatial-intelligence (ASG) and Federal Agencies.
* Conducts planning, analysis/traceability of user requirements, architectures traceability, procedures, and problems to automate or improve existing systems and review cloud service capabilities, workflow, and scheduling limitations.
* Develops solutions designs based on analysis of requirements and new technology and mentor Junior Engineers in developing these skill sets.
* Assists the Government in the capture and translation of mission and customer requirements/needs into systems/capability requirements and solutions.
* Supports the analyses and allocation of requirements to systems architecture components and executing programs.
* Assists the Government in performing systems integration activities.
* Assists with Analysis of Alternatives (AoAs), Course of Actions (CoAs), Trade Studies, and Engineering Assessments.
* Assists the Government in strategic technical planning, project management, performance engineering, risk management and interface design.

**Skills and Experience:**

Required:

* Bachelor’s degree in Systems Engineering or in related technical or scientific fields such as engineering, physics, mathematics, operations research, engineering management, Computer Science, Information Technology, Management Information Systems, or related STEM degree program.
* Mid-level working experience in government or industry in relevant work areas including: DoD/IC Acquisition Process, Requirements Process, PPBES Process or system engineering of large complex System of Systems or Service Oriented Architecture/Cloud environments.
* Mid-level working system engineering experience in government or industry.

Desired:

* Working knowledge of Model Based Systems Engineering, processes, tools and languages.
* Working knowledge of Software Development Frameworks.
* Documented work experience in the field of geospatial intelligence.
* Membership or active participation in any of the following professional organizations:
  + ACSM
  + ASCE
  + ASPRS
  + OGC
  + SAREM
  + USGIF
* Working knowledge of photogrammetry, remote sensing, image science, information sciences, geographic information systems, geomatics, or related fields.
* Demonstrated knowledge of the current NSG/ASG and NRO enterprises.

**Position 6: Test Systems Engineer (Senior-Level)**

**Overall Assignment Description:**

Senior-level Test Systems Engineers assist in leading Application, System and Integration Testing teams performing test and evaluation across the National System of Geospatial-intelligence (NSG), Allied System of Geospatial-intelligence (ASG) and Federal Agencies to ensure timely and accurate GEOINT.

**Duties include:**

* Guides Mid-level and Junior-level system engineers performing test and evaluation across the National System of Geospatial-intelligence (NSG), Allied System of Geospatial-intelligence (ASG) and Federal Agencies.
* Performs testing of applications and application programming interfaces (APIs) in DevOps pipelines utilizing quality assurance measures established by the government and industry best practices.
* Performs independent integration testing on the system software or hardware to determine the system’s compliance with specified requirements.
* Plans and executes manual tests, and automated test scripts using scripting and programming languages.
* Supports technical investigations for defects discovered during test activities.

**Skills and Experience:**

Required:

* Bachelor’s degree in Engineering, Computer Science, Information Technology, Management Information Systems, or related STEM degree program.
* Experience with test management and defect tracking tools.
* Experience with three or more of the following; JMeterand, Jenkins, Docker, Postman, Swagger, Nexus, Apigee or GitHub/GitLab (or equivalent software packages), Java, Bash, Curl, XML, JSON, SQL, Python, Javascript, and AWS and C2S.
* Experience with traditional, Agile, and DevOps development practices and associated testing strategies.

Desired:

* Master’s degree in Computer Science, Information Technology, Management Information Systems, or related STEM degree program.
* Working knowledge of Model Based Systems Engineering, processes, tools and languages.
* Working knowledge of Software Development Frameworks.

**Position 7**: **Network Systems Engineer (Expert)**

**Overall Assignment Description:**

Expert Network Engineers plan and develop telecommunications solutions involving computer and communications equipment. They analyze network alternatives and develop recommendations for improvements.

**Duties include:**

* Analyzes, designs, tests, and evaluates network systems, such as local area networks (LAN), wide area networks (WAN), Internet, intranet, satellite, and other data communications systems.
* Performs network modeling, analysis, and planning.
* Oversees the work of Senior-, Mid-, and Junior-level contractor Network Systems Engineers.

**Skills and Experience:**

Required:

* Master’s degree in Engineering, Computer Science, Information Technology, Management Information Systems, or related STEM degree program.
* Expert-level working experience in cloud-based systems architecting.
* Network technology course/certification in TCP/IP with applied understanding of the following:
  + Roles of devices in TCP/IP network
  + Details of IP, ARP, TCP, ICMP and UDP
  + Functions of FTP, HTTP, Telnet and other applications of TCP/IP
  + Use of Voice over IP or VoIP, email messaging and multicasting
  + Troubleshooting for TCP/IP issues at each network layer

Desired:

* Network technology course/certification in one or more areas:
  + Configuring TCP/IP on server computers
  + Managing and troubleshooting DNS and DHCP
  + Installing and configuring network and software infrastructure
  + Configuring and managing device routing and remote access
  + Monitoring and maintain network infrastructure
* Completion of a specialized wireless network course and/or certification

**Position 8: Cyber Security Engineer (Expert)**

**Overall Assignment Description:**

Expert Cyber Security Engineers capture and refine information security requirements and ensure that the requirements are integrated into information technology component products and information systems through purposeful security architecting, design, development, and configuration.

**Duties include:**

* Assists with leading development teams working to design and develop information systems or upgrade legacy systems.
* Conducts product research and support Analysis of Alternative (AoA) activities that independently identify the most appropriate security solutions.
* Assists with leading the development of system concepts, contribute to the capability phase of the systems development lifecycle, and translate technology and environmental conditions (e.g., law and regulation) into system security designs and processes.
* Assists with leading the development and documentation of Security Architectures, Roadmaps, and investments.
* Oversees the work of Senior-, Mid-, and Junior-level contractor Cyber Security Engineers.

**Skills and Experience:**

Required:

* Master’s degree in Engineering, Computer Science, Information Technology, Management Information Systems, or related STEM degree program.
* Expert working experience in government or industry within Cyber Security Engineering.
* DoD 8570 Level II (IASAE) certification compliance

Desired:

* Expert working experience in government or industry leading enterprise-level cyber security efforts involving architecting, designing, development, and configuration of cloud and on premise based systems and software.
* Experience engineering Cyber Security solutions using Cloud-based technologies.
* Experience engineering Cyber Security solutions using structured and unstructured Big Data.
* Experience engineering Cyber Security solutions using Automation, Augmentation and Artificial Intelligence technologies.

**Position 9**: **Cloud Architect (Expert)**

**Overall Assignment Description:**

Expert Cloud Architects assist in leading and overseeing the planning and development of cloud services architectures. They ensure analysis of cloud service alternatives are conducted and prioritized to ensure the Government properly architects business and mission solutions using cloud bases systems and services.

**Duties include:**

* Assists with leading cultural change for cloud adoption.
* Assists with overseeing development and coordination of cloud architectures.
* Develops cloud strategies and coordinating adoption of cloud-based solutions.
* Oversees the work of Senior-, Mid-, and Junior-level contractor Cloud Architects.

**Skills and Experience:**

Required:

* Master’s degree in Computer Science, Information Technology, Management Information Systems, or related STEM degree program.
* Expert experience in cloud-based systems architecting.
* One or more Cloud Certifications
  + Cloud Certified Solutions Architect
  + AWS Certified
  + Cisco Certified Networking Administrator – Cloud
  + Cisco Certified Network Professional – Cloud
  + IBM Certified Cloud Solution Architect
  + MCSE Cloud Platform and Infrastructure
  + VMware Certified Professional (VCP7-CMA)

Desired:

* Previous working experience in government or industry, within Cloud Architect profession.
* Experience architecting solutions using structured and unstructured Big Data.
* Experience architecting solutions using Automation, Augmentation and Artificial Intelligence technologies.
* Experience architecting solutions using Model Based Systems Engineering.

**Position 10: Cloud Engineer (Senior-Level)**

**Overall Assignment Description:**

Senior-Level Cloud Engineers support the Government by leading and overseeing the definition and implementation approaches and plans to ensure optimum cloud performance and reliability across the servers, networks, and related utilities and hardware that comprise the cloud infrastructure. They lead analyses and make reliable engineering recommendations to ensure six sigma reliability/resiliency of the cloud infrastructure. They oversee and monitor and report on cloud utilization and plan continuous process improvement.

**Duties include:**

* Assists with leading and overseeing application of a systematic, engineering approach to the design, architecting, requirements elicitation, development, operation and use of cloud technologies and platforms for mission solutions.
* Leverages software-, platform- and infrastructure- as-a-service to deliver GEOINT solutions.
* Ensures optimum efficiencies for the utilization of cloud services.
* Oversees the work of Mid- and Junior-level contractor Cloud Engineers.

**Skills and Experience:**

Required:

* Bachelor’s degree in Computer Science, Information Technology, Management Information Systems, or related STEM degree program.
* Senior-level working experience in government or industry supporting or leading cloud-based systems engineering efforts.

Desired:

* One or more Cloud Certifications
  + AWS Certified
  + Cisco Certified Networking Administrator – Cloud
  + Cisco Certified Network Professional – Cloud
  + IBM Certified Cloud Solution Architect
  + MCSE Cloud Platform and Infrastructure
  + VMware Certified Professional (VCP7-CMA)
* Citrix XenApp expertise or certification
* Experience in Scripting/automation via PowerShell, VBscript, AutoIT or the like
* SAN storage infrastructure experience (EMC in particular)
* Microsoft Clustering experience
* Microsoft SQL experience (installation, configuration, troubleshooting experience)

**Position 11: Cloud Engineer (Mid-Level)**

**Overall Assignment Description:**

Mid-Level Cloud Engineers define, implementation approaches and plans to ensure optimum cloud performance and reliability across the servers, networks, and related utilities and hardware that comprise the cloud infrastructure. They conduct analysis and make reliable engineering recommendations to ensure six sigma reliability/resiliency of the cloud infrastructure. They monitor and report on cloud utilization and plan continuous process improvement.

**Duties include:**

* Supports applying a systematic, engineering approach to the design, architecting, requirements elicitation, development, operation and use of cloud technologies and platforms for mission solutions.
* Leverages software-, platform- and infrastructure- as-a-service to deliver GEOINT solutions.
* Ensures optimum efficiencies for the utilization of cloud services.

**Skills and Experience:**

Required:

* Bachelor’s degree in Computer Science, Information Technology, Management Information Systems, or related STEM degree program.
* Mid-level working experience in government or industry supporting or leading cloud-based systems engineering efforts.

Desired:

* One or more Cloud Certifications
  + AWS Certified
  + Cisco Certified Networking Administrator – Cloud
  + Cisco Certified Network Professional – Cloud
  + IBM Certified Cloud Solution Architect
  + MCSE Cloud Platform and Infrastructure
  + VMware Certified Professional (VCP7-CMA)
* Citrix XenApp expertise or certification
* Experience in Scripting/automation via PowerShell, VBscript, AutoIT or the like
* SAN storage infrastructure experience (EMC in particular)
* Microsoft Clustering experience
* Microsoft SQL experience (installation, configuration, troubleshooting experience)

**Position 12: Cloud Engineer (Junior-Level)**

**Overall Assignment Description:**

Junior-Level Cloud Engineers support implementation approaches and plans to ensure optimum cloud performance and reliability across the servers, networks, and related utilities and hardware that comprise the cloud infrastructure. They conduct analysis and make reliable engineering recommendations to ensure six sigma reliability/resiliency of the cloud infrastructure. They monitor and report on cloud utilization and plan continuous process improvement.

**Duties include:**

* Supports applying a systematic, engineering approach to the design, architecting, requirements elicitation, development, operation and use of cloud technologies and platforms for mission solutions.
* Leverages software-, platform- and infrastructure- as-a-service to deliver GEOINT solutions.
* Ensures optimum efficiencies for the utilization of cloud services.

**Skills and Experience:**

Required:

* Bachelor’s degree in Computer Science, Information Technology, Management Information Systems, or related STEM degree program.
* Junior-level working experience in government or industry supporting or leading cloud-based systems engineering efforts.

Desired:

* One or more Cloud Certifications
  + AWS Certified
  + Cisco Certified Networking Administrator – Cloud
  + Cisco Certified Network Professional – Cloud
  + IBM Certified Cloud Solution Architect
  + MCSE Cloud Platform and Infrastructure
  + VMware Certified Professional (VCP7-CMA)
* Citrix XenApp expertise or certification
* Experience in Scripting/automation via PowerShell, VBscript, AutoIT or the like
* SAN storage infrastructure experience (EMC in particular)
* Microsoft Clustering experience
* Microsoft SQL experience (installation, configuration, troubleshooting experience)

**Position 13**: **Systems Integrator (Expert)**

**Overall Assignment Description:**

Expert Systems Integrators support the Government by leading and overseeing the integrity of the NSG/ASG systems-of-systems enterprise. They lead and oversee planning, implementation approaches, testing, documenting, and maintaining solutions for total cloud services, systems or subsystems using defined processes and tools. They provide end-to-end system development life cycle support to the program.

**Duties include:**

* Assists with leading and performing systems integration activities across the NSG, ASG and Federal Agencies to ensure timely and accurate GEOINT.
* Assists with leading and overseeing a total systems perspective including a technical understanding of relationships, dependencies and requirements of cloud services, infrastructure and security domains.
* Assists with overseeing the preparation of engineering plans and site installation technical design packages.
* Oversees the work of Senior-, Mid-, and Junior-level contractor Systems Integrators.

**Skills and Experience:**

Required:

* Master’s degree in Computer Science, Information Technology, Management Information Systems, or related STEM degree program.
* Expert system integration working experience in government integrating large complex System of Systems or Service Oriented Architecture/Cloud environments.

Desired:

* Working knowledge of Model Based Systems Engineering, processes, tools and languages.

**Position 14**: **Systems Integrator (Senior)**

**Overall Assignment Description:**

Senior Systems Integrators support the Government by leading and overseeing the integrity of the NSG/ASG systems-of-systems enterprise. They lead and oversee planning, implementation approaches, testing, documenting, and maintaining solutions for total cloud services, systems or subsystems using defined processes and tools. They provide end-to-end system development life cycle support to the program.

**Duties include:**

* Assists with leading and performing systems integration activities across the NSG, ASG and Federal Agencies to ensure timely and accurate GEOINT.
* Assists with leading and overseeing a total systems perspective including a technical understanding of relationships, dependencies and requirements of cloud services, infrastructure and security domains.
* Assists with overseeing the preparation of engineering plans and site installation technical design packages.
* Oversees the work of Mid-, and Junior-level contractor Systems Integrators.

**Skills and Experience:**

Required:

* Bachelor’s degree in Computer Science, Information Technology, Management Information Systems, or related STEM degree program.
* Senior system integration working experience in government integrating large complex System of Systems or Service Oriented Architecture/Cloud environments.

Desired:

* Working knowledge of Model Based Systems Engineering, processes, tools and languages.

**Position 15**: **Systems Integrator (Mid)**

**Overall Assignment Description:**

Mid-level Systems Integrators support the Government assisting with the development and integrity of the NSG/ASG systems-of-systems enterprise. They assist with planning, implementation approaches, testing, documenting, and maintaining solutions for total cloud services, systems or subsystems using defined processes and tools. They provide end-to-end system development life cycle support to the program.

**Duties include:**

* Assists with performing systems integration activities across the NSG, ASG and Federal Agencies to ensure timely and accurate GEOINT.
* Assists with a total systems perspective including a technical understanding of relationships, dependencies and requirements of cloud services, infrastructure and security domains.
* Assists with the preparation of engineering plans and site installation technical design packages.

**Skills and Experience:**

Required:

* Bachelor’s degree in Computer Science, Information Technology, Management Information Systems, or related STEM degree program.
* Mid-level system integration working experience in government integrating large complex System of Systems or Service Oriented Architecture/Cloud environments.

Desired:

* Working knowledge of Model Based Systems Engineering, processes, tools and languages.

**Position 16**: **Integration Engineer (Senior-Level)**

**Overall Assignment Description:**

Senior-level Integration Engineers are responsible for leading the development of program and project integration solutions across the enterprise and determining integration/interface requirements. They work with systems engineers, solutions architects and programmers to ensure applications and systems interoperate to deliver end-to-end mission solutions and maintain the integrity of the system-of-system enterprise.

**Duties include:**

* Provides a total systems perspective including a technical understanding of relationships, dependencies and requirements of hardware and software components.
* Plans, coordinates, and documents solutions to total systems or subsystems using internally created and/or commercial off-the-shelf products.
* Analyses, designs, tests, and evaluates network systems such as Cloud Resident computing capabilities, satellite networks, local area networks (LANs), wide area networks (WANs), the Internet, intranets, and other data communications systems ranging from a connection between two offices in the same building to a globally distributed network of systems.
* Plans and coordinates data management practices to treat and handle data as a resource.
* Assists Government in managing system development efforts, moves or modernization changes including analysis, telecommunications (LAN, WAN, voice, video), planning, cabling, IT and cloud requirements, network security measures, and other factors.
* Oversees the work of Mid-, and Junior-level contractor Integration Engineers.

**Skills and Experience:**

Required:

* Bachelor’s degree in Engineering, Computer Science, Information Technology, Management Information Systems, or related STEM degree program.
* Senior-level working experience in government or industry in data base management or Big Data analysis.

Desired:

* Master’s degree in Engineering, Computer Science, Information Technology, Management Information Systems, or related STEM degree program.
* Working knowledge of Model Based Systems Engineering, processes, tools and languages.