General Position Information

Job Title: HW674 - Chief Data Architect - SNIS Professional Tier 1

Salary Range: None provided (not applicable for detailees)

Vacancy Open Period: 11/20/2017 – 12/5/2017

Position Type: Cadre, Detailee

Who May Apply: Internal ODNI Candidates, Detailees

Division: CIO/CIO

Duty Location: Bethesda, MD

Security Clearance: TS/SCI with CI Polygraph

Travel Required: 0-25% Travel

Relocation Expenses: For new ODNI employees, reimbursement for relocation is discretionary based on availability of funds.

Job Interview Travel: Candidates from outside the Washington, D.C., area may be selected for a telephone, teleconference, or in-person interview. If selected for an in-person interview, any travel or lodging will be at the applicant’s personal expense.

Position Information

This is an opportunity for:

- An internal candidate to fill a SNIS Professional Tier 1 cadre position.
- A Federal Government employee to serve on a two-year reimbursable detail assignment in the ODNI. The detail assignment may be extended an additional year if all parties agree.

Who May Apply

Only Senior Service (SNIS, SES, SIS, DISES, DISEL) candidates may apply. GS employees may not apply.

Former members of the Peace Corps may be considered for ODNI employment only if five full years have elapsed since separation from the Peace Corps.

- For a cadre assignment:
  - Current ODNI permanent cadre.
For a detailee assignment:

- Current Federal Government employees. Only Senior Service (SNIS, SES, SIS, DISES, DISEL) candidates may apply. GS employees may not apply.

**Salary Determination**

- The ODNI uses a rank-in-person system in which rank is attached to the individual. A selected ODNI candidate or other Federal Government candidate will be assigned to the position at the employee's current GS grade and salary.

- A current Federal Government employee, selected for a detail, will be assigned to the position at his or her current grade and salary.

**Component Mission**

The Director of National Intelligence (DNI) serves as the head of the Intelligence Community (IC). The DNI also acts as the principal advisor to the President, the National Security Council and the Homeland Security Council for Intelligence matters related to the national security; and oversees and directs the implementation of the National Intelligence Program. The DNI leads intelligence integration and forges an intelligence community that delivers the most insightful intelligence possible.

The Intelligence Community Chief Information Office (CIO) is responsible for advancing the IC’s mission by driving secure collaboration, integration, and information sharing; identifying and addressing information enterprise risks; and providing strategic leadership and oversight of the IC’s enterprise architecture and enterprise information technology.

The Intelligence Community is seeking a Chief Data Architect to create a strategic data architecture that can be implemented across the 17 IC Elements. The IC Data Architecture is a critical element of the IC Enterprise Architecture that solidifies the concept of *Data is an IC Asset*. This will provide sufficient detail to enable solutions to be repeatedly designed and deployed in a consistent, high-quality and supportable fashion. The architecture will identify standards that are scalable and agile, built on the concept of data-centricity to facilitate extraction of data in multiple formats, separating data from applications, and apply to a wide range of uses as internal and external needs change.

The incumbent will design, model, document, and guide the logical and conceptual relationship of data and databases for complex applications. The incumbent will analyze needs and requirements of existing and proposed systems, and assist IC Elements with developing technical, structural, and organizational specifications for future systems. The incumbent may work with other elements to create standards and/or do modeling to monitor and enhance capacity and performance. The incumbent will communicate with technical, applications, and operational staff, in order to design an optimal data architecture (considering performance, accessibility, backup, and recovery requirements). The incumbent may analyze and make recommendations for improvements to existing software regarding
database performance, stability, usability and scalability, or support the development effort by authoring stored procedures, functions, views and check constraints.

The Chief Data Architect provides senior technical leadership, guidance, and support in the design, deployment and operation of core data systems supporting IC Information Environment (IE) applications. This position is responsible for evaluation and recommendation of commercial and open-source tools for large-scale data systems providing high availability, geographic diversity and low latency. The incumbent will formulate design patterns for mapping data to different technologies (relational DB, analytic appliances, in-memory caches, distributed NoSQL solutions) based upon data security, update frequency, access volume and latency/performance needs. Detailed technical writing, visual presentations / illustrations and verbal communication with peers and senior management personnel are core skills required by this position.

**Major Duties and Responsibilities (MDRs)**

- Must be able to conceptualize and build a single IC-wide data architecture, consistent with the IC Enterprise Architecture, and provide hands-on data architecture leadership to all main areas of deliverables.
- Lead the design and oversee development of a high-quality Data Warehouse / Data Lake that fully supports operational, targeting, and analytical needs.
- Provide technical expertise on data analytics, computing techniques and technologies and expert advice to the IC IE data program and related computing architectures.
- Assist IC community with data integration and migration efforts, including mapping schemas, RDF translations, and defining domain specific ontologies, where applicable.
- Develop To-Be Data Hosting Architecture in the IC Cloud [Amazon Web Services (AWS) / C2S, IC Gov Cloud] and other hosting environments, leveraging a services based architecture and Big Data technologies/solutions leveraging Hadoop and other Big Data Technologies.
- Evaluate existing IT systems (Oracle, Mark Logic, etc.) and provide recommendations for To-Be architecture compliance/evolution, including specific recommendations for implementation within AWS.
- Determine overall modeling standards, guidelines, best practices and approved modeling techniques.
- Provide technical expertise on data analytics, computing techniques and technologies and expert advice to the IC IE data program and related computing architectures.
- Research, evaluate, and oversee the deployment of advanced cloud computing systems and large data analytics for the IC and specific mission customers.
Prepare and provide recommendations for IT standards, especially those required for implementation leveraging IC-ITE Hosting Services.

Prepare technical implementation road maps to support the evolution of existing capabilities to the To-Be architecture, including leveraging IC Cloud (AWS / C2S, Gov Cloud, and other emerging cloud environments) specific services to implement the To Be architecture.

Provide support to update both To-Be, As-Is, and Technical Roadmaps as the architecture is implemented.

Research, evaluate, and deploy advanced cloud computing systems and large data analytics for the IC.

Manage, engage and influence key stakeholder to support the ODNI’s key objectives.

Mandatory and Educational Requirements

- Demonstrated knowledge in enterprise data strategy, data governance practices, data stewardship principles, data architecture principles, data standards, and metadata management best practices
- Experience with successful full life-cycle software development projects.
- Ability to translate requirements into end-to-end designs for systems that involve multiple interfaces and supporting data repositories.
- For example, this may include experience with Web Services, Service-Oriented Architecture (SOA), application integration technologies and approaches, Business Intelligence/Data Warehousing solutions, data management technologies (Extract- Transform-Load (ETL), Data Profiling, Data Mining, Metadata Repositories)
- Experienced with information extraction and analysis techniques, practices, and algorithms.
- Possess a knowledge of a variety of advanced computer science and mathematical concepts, practices, and procedures associated with the analysis of large datasets, from indexing schemes to statistical tests.
- Experience in executing multiple data storage, data management, and data transfer technologies such as Hadoop, NoSQL, SQL, XML and JSON.
- Knowledge of Cloud computing, Hadoop or MapReduce, Netezza, Vertica, BigTable, Pig, Terradata, or AWS.
- Apply expert knowledge in computer science, particularly in the Semantic Web and cloud computing environments
• Proven leadership ability and business acumen, capable of developing effective strategies, building coalitions, identifying and implementing enterprise solutions, and driving change to improve operations within large, complex organizations.

• Expert knowledge and experience in the IC, and thorough understanding of the IC CIO mission, goals and objectives.

• Master ability to evaluate and integrate differing viewpoints into an IC perspective in order to increase a comprehensive understanding of key issues and communicate alternative perspectives.

• Executive presence with a high-level of technical credibility with business knowledge.

• A minimum of 10 years’ experience in software development/architecture. A bachelor’s degree from a globally recognized institute of higher learning is required, with an advanced degree (MS, PhD or equivalent) strongly preferred.

• Exceptional interpersonal skills to work effectively with internal and external leaders and ability to network and coordinate across the IC.

Key Requirements and How To Apply

Internal ODNI Candidates:

A complete application package must include:

a. RESUME: Applicants are encouraged to carefully review the vacancy announcement, particularly the MDRs, and construct their resume to highlight their most significant experience and qualifications relevant to this job opportunity.

b. PERFORMANCE EVALUATIONS: Applicants are required to provide their two most recent performance evaluations. A justification is required if the applicant is unable to provide the two most recent evaluations.

c. VACANCY NUMBER: Reference the vacancy number in the subject line of the email and on each document submitted.

d. COVER LETTER: Applicants must submit a cover letter as a supplement to the resume to elaborate on their qualifications and previous work performed.

WHERE TO SUBMIT: Applications should be sent to either DNI-MSD-HR-RR-Team_B_WMA@dni.ic.gov (classified email system) or Recruitment_TeamB@dni.gov (unclassified email system). Applicants submitting via JWICS are requested to submit their materials to both
joswida@dni.ic.gov (Daniel J.), mitchsl@cia.ic.gov (Stephanie M.) and bethemo@dni.ic.gov in lieu of the group address above. All attachments should be in Microsoft Word or Adobe PDF format.

Applications submitted through the classified email system should NOT contain classified information above the TS//SI/LK//NOFORN level.

Current Federal Employees Applying for a Detail Assignment:

**Applicants from federal agencies within the Intelligence Community (IC)** may be considered for this position as a reimbursable detailee, if endorsed by the employing agency. Applicants must have current TS/SCI clearances with polygraph or have the ability to obtain one. The ODNI does not conduct polygraphs or provide security clearances for detailees. **Applicants from within the IC must submit an application through the classified [IC Joint Duty Program website](http://example.com).**

**Applicants from federal agencies outside the IC** must provide:

a. **WRITTEN ENDORSEMENT** from the employing agency concurring with the detail.

b. **RESUME:** Applicants are encouraged to carefully review the vacancy announcement, particularly the MDRs, and construct their resume to highlight their most significant experience and qualifications relevant to this job opportunity.

c. **PERFORMANCE EVALUATIONS:** Applicants are required to provide their two most recent performance evaluations. A justification is required if the applicant is unable to provide the two most recent evaluations.

d. **VACANCY NUMBER:** Reference the vacancy number in the subject line of the email and on each document submitted.

e. **CURRENT SF-50:** Federal Government employees must provide an SF-50, “Notification of Personnel Action” to verify current federal status, position, title, grade, and organization of record.

f. **COVER LETTER:** Applicants must submit a cover letter as a supplement to the resume to elaborate on their qualifications and previous work performed.

WHERE TO SUBMIT: Applications should be sent to either DNI-MSD-HR-RR-Team_B_WMA@dni.ic.gov (classified email system) or Recruitment_TeamB@dni.gov (unclassified email system). Applicants submitting via JWICS are requested to submit their materials to both joswida@dni.ic.gov (Daniel J.), mitchsl@cia.ic.gov (Stephanie M.) and bethemo@dni.ic.gov in lieu of the group address above. All attachments should be in Microsoft Word or Adobe PDF format.

Applications submitted through the classified email system should NOT contain classified information above the TS//SI/LK//NOFORN level.
All Applicants:

APPLICATION PACKAGES MUST CONTAIN ALL ITEMS LISTED ABOVE. AN INCOMPLETE APPLICATION PACKAGE WILL BE INELIGIBLE FOR CONSIDERATION.

Your application MUST be received by midnight on the closing date of this announcement. Applications received after the closing date will NOT be eligible for consideration.

To verify receipt of your application package ONLY, you may call 301-243-0730.

What To Expect Next:

The most highly qualified candidates will be referred to the hiring manager for further consideration and possible interview. We expect to make a selection within 30 days of the closing date of this announcement. Due to the large number of applications received, applicants will be contacted ONLY if they have been selected for an interview.

Agency Contact Information

ODNI Recruitment; Phone: 301-243-0730; Email: Recruitment_TeamB@dni.gov

Other Information

The ODNI is an equal opportunity employer and abides by applicable employment laws and regulations.

REASONABLE ACCOMMODATIONS FOR PERSONS WITH DISABILITIES: The ODNI provides reasonable accommodations to otherwise qualified applicants with disabilities. IF YOU NEED A REASONABLE ACCOMMODATION for any part of the application and hiring process, please notify the Intelligence Community Equal Employment Opportunity and Diversity Office Representative by classified email at DNI-EEOD-RA-ACF@exchange.cia.ic.gov, by unclassified email at DNI-EEOD@dni.gov, by telephone at 301-243-0704 or by FAX at 301-243-1200. Your request for reasonable accommodation will be addressed on a case-by-case basis. PLEASE DO NOT SUBMIT YOUR APPLICATION TO THE EEOD EMAIL ADDRESS. THIS EMAIL IS FOR REASONABLE ACCOMMODATION REQUESTS ONLY. PLEASE SUBMIT YOUR APPLICATION VIA THE EMAIL ADDRESS PROVIDED IN THE ‘HOW TO APPLY’ SECTION ABOVE.