

REQUEST FOR PROPOSAL

IT STAFFING

The Government entity is soliciting competitive proposals to provide IT Staffing services as specified in this RFP. The entity is committed to improving productivity, protecting the Entity's information technology investment, and maximizing operational efficiency. The contract(s) that is established as a result of this RFP will be for the use of various Departments.

The entity has an annual budget of almost \$5.8 billion. This RFP is required to execute new contracts to continue meeting the IT needs where the entity job classifications do not exist for specialized skill sets or to meet temporary staffing needs. The Contracts will provide for miscellaneous IT Staffing and Special Project Services required by several departments to augment existing permanent staff who do not possess the necessary specialized skill sets or to provide temporary staffing to meet project needs. This RFP will provide for a pool of contracted vendors that will be available to all departments entity wide.

The work of departments comprises many distinct lines of business with each department having its unique vocabulary, processes, technical skill set requirements, and systems. In addition, contracting has become a necessity due to the need to modernize systems and the amount of work exceeds the resources of existing permanent staff. Multiple contracts for IT Staffing and Special Project Services are historically necessary to ensure that sufficient supplemental IT staffing is available to all Entity departments.

Evaluation - This proposal award will be determined by factors other than price alone. The entity's sole purpose in the evaluation process is to determine from among the Responses received, which one is best suited to meet the needs. Any final analysis or weighted point score does not imply that one proposal is superior to another, but simply that in our judgment the proposal(s) we select offer(s) the best overall solution for our current and anticipated needs.

The entity will award to one or more vendors within each grouping whose offer in total presents the greatest value, in our view, to the entity from the standpoint of suitability to

purpose, quality, service, previous experience, price, life cycle cost, ability to deliver, or for any other reason deemed by the Purchasing Agent to be in the best interest of the entity. The results will not be determined by price alone.

Phase 1: In Phase 1, Responses will be examined as to whether or not Bidders understood and responded in accordance with the following requirements:

- Quality of Response
- Financial Report

Phase 2: In Phase 2, Responses that were not disqualified in Phase 1 will be evaluated using the following requirements:

- Resumes
- Labor Rates

Specifications

The following types of IT staffing personnel are needed to perform the services requested in this RFP. There will be a contract awarded per grouping. Multiple vendors will be awarded for each contract. A vendor may propose for multiple groupings. Prospective vendors must propose to provide a minimum of one of the following groups and must indicate which of the following personnel groups are being proposed.

The entity recognizes that during the life of these contracts, new technologies will emerge and contractors with specialized skills will be needed. The contracts awarded for each of the groups below will also be used to obtain candidates with very specialized skill sets. All vendors will be polled when there is a need for these types of specialized skills. The exact skill set needed will be further defined at the time the request for resumes is issued.

I. VOICE AND DATA NETWORK MANAGEMENT GROUP

The Entity standard for voice and data network equipment is Cisco. Network management refers to the activities, methods, procedures, and tools that pertain to the operation, administration, maintenance, and provisioning of networked systems.

- Operation deals with keeping the network (and the services that the network provides) up and running smoothly. It includes monitoring the network to spot problems as soon as possible, ideally before users are affected.
- Administration deals with keeping track of resources in the network and how they are assigned. It includes all the "housekeeping" that is necessary to keep the network under control.
- Maintenance is concerned with performing repairs and upgrades-for example, when equipment must be replaced, when a router needs a patch for an operating system image, when a new switch is added to a network. Maintenance also involves corrective and preventive measures to make the managed network run "better", such as adjusting device configuration parameters.
- Provisioning is concerned with configuring resources in the network to support a given service. For example, this might include setting up the network so that a new customer can receive voice service.

The Entity will look for candidates in this group with skills in the ISO network management

model's five functional areas:

- Fault Management - Detect, isolate, notify, and correct faults encountered in the network.
- Configuration Management - Configuration aspects of network devices such as configuration file management, inventory management, and software management.
- Performance Management - Monitor and measure various aspects of performance so that overall performance can be maintained at an acceptable level.
- Security Management - Provide access to network devices and corporate resources to authorized individuals.
- Accounting Management-Usage information of network resources.

Network Planning and Installation Specialist Job Description:

Plans, designs, and implements Entity voice and data network hardware/software. Supports and solves problems with Entity networking tools hardware/software. Areas of expertise and experience needed include: Technology selection and strategic planning WAN internetworking, LAN Switching, network security, remote access services, Voice over IP services, Video Conferencing services, technical architectures, and network management systems. Inclusive will be systems analysis including performance and capacity measurements, tuning, network redesigns, and integration of new and existing technologies in a multi-protocol environment. Also, design implementation methodologies and initiate project proposals and plans. Involvement in asset management processes. Also assists in the development of long-range IT planning. Other duties: Installs, modifies, and maintains Entity network hardware/software. Duties will also include interfacing with our customers and vendors.

Duties include:

- Isolating and resolving network problems
- Troubleshooting connectivity issues on various copper and fiber media at all layers of the OSI model.
- Performing traces for resolving difficult or intermittent problems
- Troubleshooting endpoint connectivity issues

- Examining/evaluating capture data from connected network devices-- to discover/resolve performance issues
- Assisting in data collection, analysis, reporting and recommendations for appropriate actions
- Troubleshoot LAN protocols
- Capacity planning
- Technical problem resolution and/or consultation
- System integration of hardware and software
- Service planning
- Product evaluation.

Minimum mandatory requirements:

- Knowledge and experience with networking tools and services. Examples include: TCP/IP based services (such as HTTP, FTP, SMTP, SNMP,), Firewalls, Internet service providers, Domain Name Services, Point- to-Point radio LAN/WAN.
- Knowledge and experience with the installation, configuration and administration of WAN equipment and multi-layered switched networks (such as switches and routers).
- Enterprise analytical experience in network design. Examples include: Unix Systems (host tables and firewalls), MPLS support and design, routing protocol design (IGRP, EIGRP, BGP and OSPF), Point-to- Point and access point radio configurations.

The following certifications may be required:

- Microsoft Certified Systems Engineer (M.C.S.E.)
- Microsoft Certified Solution Developer (M.C.S.D.)
- Cisco Certified Internetworking engineer (C.C.I.E.)
- TCP/IP Network Analyst Certification
- Cisco Certified Network Associate (C.C.N.A.)
- Cisco Certified Network Professional (C.C.N.P.)

Cisco Call Manager and UCCE Management and Development Job Description:

The Entity standard for Voice over Internet Protocol (VoIP) telephony infrastructure is Cisco. This category includes implementation services and development of software solutions to meet the Entity's VoIP telephony needs. Candidates in this category will have experience in developing applications that bring together voice, existing production applications, video, and data to meet customers' needs.

Candidates will have expertise and experience in the following functional areas:

- Unified Communication software applications
- IP telephony implementation services
- IP telephony application development services
- Deployment of IP telephony systems.

Minimum mandatory requirements:

- Understand the Cisco Unified Contact Center product portfolio and platform architecture
- Experience with UCCE deployment and application configuration—including preparation, planning, design, and implementation
- Implement traditional, current-generation, and next-generation call routing
- Master the latest best practices for call flow scripting
- Understand UCCE's nodes and distributed processes and build a clean system startup sequence
- Design, implement, and deliver unified CM/IP IVR solutions
- Set up and efficiently manage UCCE databases
- Experience in using UCCE's reporting tools
- Ability to create advanced applications with Data-Driven Routing
- Effectively maintain any UCCE deployment, including older versions
- Use a best-practice methodology for troubleshooting, and master valuable, little-known Cisco

diagnostic tools.

II. PROJECT MANAGEMENT/APPLICATION DEVELOPMENT GROUP

Project Manager/Business Analyst Job Description:

Performs as a Project Manager; providing strong leadership and day-to-day project management. Performs liaison with the Steering Committee and Sponsor as well as consulting partner management. Defines implementation strategies, prepares, and maintains project plans, budget and work distribution plans. Maintains knowledge of business processes and works with all levels of management. Acquires, assigns and manages project resources. Communicates project status to the Steering Committee, Project Sponsor, and Project Team.

Minimum mandatory requirements:

- Experience in analyzing problems or needs, developing requirements, performing logical design activities, writing design specifications, testing design results and coordinating production implementation.
- Strong written and oral communication skills and a background of successful experience in the use of those skills.
- Must have the ability to conduct workgroup/workflow (Business Process) analysis.
- Familiarity with information engineering/CASE principles and functional analysis techniques.
- Experience managing projects and developing associated documentation.
- Experience planning workload distributions, developing task schedules and priorities, estimating budgets.
- Experience with a systems life cycle for project development.
- Experience in problem resolution.
- Experience assigning tasks to and managing the work of others.
- Knowledge and experience with automated project management tools. Examples include M/S Project and Primavera.

The following knowledge and experience may be required:

- Managing enterprise projects
- PMI Certification
- Bachelor's Degree
- Knowledge and experience with the SAP PLM development methodology
- Knowledge and experience with core SAP ERP modules (version 6.0 or later)
- Experience in specific focus areas of SAP, including the core ERP modules and/or the Industry Solutions. Examples include: Utilities/Customer Care System (IS/U/CCS), Public Sector/Human Resources Public Sector (IS-PS/HR-PS), Telecommunications.
- Experience managing SAP or other ERP implementations.

Application Analyst/Developer Job Description:

Performs programming and analysis functions for one or more platforms. This includes creation of detailed systems specifications, technical systems design, data analysis, and program specifications as well as logic design, coding, testing, documentation and functional project management.

Minimum mandatory requirements may include:

- Network-specific application development such as the need to handle shared files on a network or address network-attached printers.
- Rapid Application Development (RAD) and Visual Development tools such as Visual Studio, Visual Studio Code.
- Structured Query Language (SQL) systems such as Oracle or MS SQL Server and related development tools.
- Commonly used programming languages, programming tools and development platforms such as C#, Visual Basic, Visual C++, Java, HTML, AML (ARC Manipulation Language), Access, or VBA.
- Knowledge and experience with Client-Server database connectivity.
- Knowledge and experience with web and mobile device application development.

- Knowledge of SDLC tools like Source control, change management, and software deployment.
- Expertise with Oracle Service Cloud configuration or development.

The following knowledge, experience, and certifications may be required:

- Product-specific expertise and certifications.
 - COBOL programming language
 - NATURAL programming language
 - Interactive programming tools
 - ADABAS database principles
 - Oracle database principles
 - SQL Server database principles
 - CICS systems
 - TSO
 - COM-LETE
 - RPG programming language
- Expertise with Microsoft's Visual Studio suite and certification as a Microsoft Certified Solution Developer (MCSD)
- Expertise with Microsoft .NET languages: ASP.Net, VB.Net, C#, .Net Core
- Expertise in data and class modeling
- Expertise in web and mobile device development languages: HTML, CSS, JavaScript, Typescript, Angular, jQuery
- Expertise in REST, WSDL, XML and developing service interfaces
- Expertise with Microsoft SQL Server tools: Reporting Services (SSRS), Integration Services (SSIS), T-SQL
- Expertise in Microsoft SharePoint development

- Expertise with Unix products.

III. ENTERPRISE CONTENT MANAGEMENT GROUP

Enterprise Content Management Analyst/Developer Job Description:

Performs analysis, configuration and programming functions related to the Entity content management platform. This includes creation of detailed systems specifications, technical systems design, data analysis, and program specifications as well as logic design, coding, testing, documentation and functional project management.

Minimum mandatory requirements include:

- Excellent communication skills
- Knowledge of records management practices
- Expertise with FileNet administration including the ability to define and implement a new object store, doc classes, search templates, entry templates, and other FileNet objects
- Expertise in SharePoint configuration and development
- Experience in creating Kofax batch classes, KTM Models, Data extraction
- Proficient with Rapid Application Development (RAD) and Visual Development tools such as FileNet Enterprise Manager, Kofax Admin Module, Visual Studio and Eclipse
- Expertise in commonly used programming languages, programming tools and development platforms, specifically Visual Basic, C#, ASP.NET, HTML, Javascript, CSS, jQuery, and Java
- Expertise in RDBMS systems, primarily MS SQL Server
- Expertise in Structured Query Language (SQL, T-SQL) and related development tools like SQL Enterprise Manager
- Expertise in Windows, Web and mobile device application development
- Knowledge of SDLC tools like source control, change management, and software deployment.

The following knowledge, experience, and certifications may be required:

- Product-specific expertise and certifications:

- FileNet Administration
- FileNet Development
- Kofax Capture
- Kofax Transformation Modules (KTM).
- SharePoint
- Microsoft Certified Solution Developer (MCSD)
- Expertise in data and class modeling
- Expertise in REST, WSDL, XML and developing service interfaces
- Expertise with Microsoft SQL Server tools: Reporting Services (SSRS), Integration Services (SSIS)
- Expertise in Microsoft SharePoint development.

IV. DATABASE GROUP

Data Base Administrator Job Description:

Duties include:

- Establishes and maintains standards and procedures for the effective utilization of the database.
- Creates primary database storage structures and primary objects.
- Performs physical database design.
- Backup and recover the database.
- Maintains database system security.
- Monitors and optimizes database performance; assists in tuning Client Server and Web based applications.
- Communicates and coordinates between development teams on project implementations.

Minimum mandatory requirements:

- Experience as a Database Administrator in an enterprise environment.

- Knowledge and experience in the installation and administration of databases and related software. Examples include Database software (RDBMS), Database connectivity software, Client/Server software and tools.
- Knowledge and experience programming in database languages. Examples include Oracle PL/SQL, NATURAL, JAVA, Transact SQL (TSQL).
- Database administration experience in creation, management, monitoring, and tuning of diverse database implementations of NoSQL and Columnar DBs. Both on premise and in cloud.
- Experience with toolsets and practices that optimize performance and scalability of growing databases and data intensive applications with high availability.

The following knowledge and experience may be required:

- Oracle (11g, 12c)
- MS SQL Server
- ADABAS
- PostGreSQL 9.x
- MySQL
- UNIX (HP-UX, Oracle Enterprise Linux, SuSe Linux)
- Windows Server
- SAP ERP IS-U/CCS
- Application and Web-server software
- PowerBuilder
- Columnar Databases
- NoSQL Databases (Mongo, CouchDB, etc...).

V. DESKTOP AND SERVER GROUP

Desktop Installation and Help Desk Support Specialist Job Description:

Performs setup, installation, and/or post installation support duties for desktop, laptop, and

mobile end user devices. Duties include:

- Equipment setup
- Installation of hardware and software
- Equipment configuration, including network interface cards, cables, and attached peripheral devices
- Delivery and set up at the customer site, including complete system and network integration testing
- Update asset inventory systems
- Verification of network access rights
- Customer orientation to the system
- Removal of old equipment, including completing necessary asset management tracking to remove a device from service
- Diagnosing problems at the customer site
- Perform research to determine resolution of difficult problems
- Collaborate with appropriate technical resources for problem resolution
- Problem resolution, including equipment configuration, installation of hardware or software, and client LAN issues at the customer site
- Problem resolution related to terminal emulation and/or Network Terminals
- Complete system testing, including network connection/application access
- Knowledge of Active Directory and remote diagnostic tools
- Participate in creating Support Models, maintain and revise processes and procedures
- Familiarity with Office 365 products and troubleshooting via telephone or remote diagnostic software.

Minimum mandatory requirements:

- Basic networking concepts

- Basic knowledge of Active Directory
- Knowledge and experience with installation and administration of desktop, laptop, and mobile end user devices.

The following certifications may be required:

- A+ certification
- Microsoft Certified Systems Engineer (M.C.S.E.)
- Microsoft Certified System Administrator (MCSA)
- Microsoft Certified Professional (MCP) in Windows 7
- Microsoft Certified Desktop Support Technician (MSDST)

The following knowledge and experience may be required:

- Basic PC BIOS, UEFI, and TPM setup
- Imaging techniques using SCCM/Endpoint Configuration Manager
- Imaging techniques using Acronis Trueimage, Macrium Reflect, or products using similar technology
- Operating system installation and configuration
- Desktop application installation

General requirements:

- Ability to lift 50 pounds
- Ability to crawl under standard office furniture for PC setup and cabling connections
- Ability to transport IT equipment (PC's, printers, monitors, etc.)
- Both oral and written communication skills
- Customer service & support skills

Server Installation and Support Specialist Job Description:

Installs, modifies, and maintains Entity Wintel, Mainframe, and Unix Server Systems. The

individual will follow the department's life cycle for project management, use problem and change control, and have responsibility for successful project implementation.

Duties include:

- Server and workstation software/hardware installation
- Server and workstation patching and software upgrade/installation (System Center Configuration Manager (SCCM))
- System customization and tuning
- Capacity planning
- Technical problem resolution
- System integration of hardware and software
- Technical consultation
- Service planning
- Product evaluation
- Provide basic server administration and general operation
- Backup and file restore/recovery.

Minimum mandatory requirements:

- Knowledge and experience with the installation and administration of operating systems and environments: Examples include Mainframe z/OS, Windows server, Unix server, and Microsoft Active Directory.
- Enterprise system experience with operating systems and environments: Examples include MS server products, Enterprise backup software, backup servers and tape libraries, Storage solutions (HP SAN, NetApp NAS, etc.), Windows OS patch management, Server monitoring and notification systems.

VI. GEOGRAPHIC INFORMATION SYSTEM (GIS) GROUP

GIS Systems Analyst Job Description:

Supports the on-going development and maintenance of Entity Entity's GIS. Tasks performed include requirements gathering; systems analysis; application design, development, testing, implementation, strategic planning; and complex spatial analyses and support projects while using ESRI software.

Minimum mandatory requirements:

- Knowledge of the capabilities of automated mapping and geographic information systems.
- Experience with Entity standard ESRI software products, including ArcGIS Desktop, ArcGIS Server, ArcSDE.
- Experience developing GIS web, desktop and mobile applications using programming tools such as asp.net, java, JavaScript, and python.
- Knowledge of cartographic principles, automated mapping.
- Knowledge of GIS database design, structure, implementation and maintenance.
- Knowledge of GIS hardware and software components, data communication, and network methods and techniques.

The following knowledge, experience, and certifications may be required:

- General GIS work experience in local government using ESRI software products.
- Familiarity with mapping and geo-processing operations in local government.
- Experience in integrating GIS with other technology systems.

VII. SAP GROUP

SAP SuccessFactors Implementation Partner Job Description:

SAP SuccessFactors Implementation partner helps with the implementation of SuccessFactors changes requiring access to provisioning. The firm must be certified for provisioning access to SuccessFactors. This person will share SuccessFactors best practices, exchange detailed documentation, and help the Entity utilize features included in our subscription. They will setup

and configure the appropriate functions in SuccessFactors provisioning in order to modify existing modules or implementation new modules to support Entity business practices.

Minimum mandatory requirements:

- Authorized access to SAP SuccessFactors provisioning tool
- Experience implementing SAP SuccessFactors modules which may include Onboarding, Performance & Goals Management, Learning, Employee Central, and Succession and Development
- Knowledge and experience with interfacing between SAP SuccessFactors and SAP on-premise solutions or other 3rd party software solutions

Desired qualifications:

- Public sector experience
- Knowledge of NeoGov configuration and integrations with SAP SuccessFactors
- Experience with SAP Analytics Cloud and use with SAP SuccessFactors data

SAP Business Systems Analyst Job Description:

Performs as a SAP Business Process Team Lead Systems Analyst including strong functional (business) team lead and business and systems analysis duties. Performs analysis specifically focused on the business processes and configuration in assigned functional area while maintaining a broad view of project goals and vision. Performance includes duties involving knowledge of special approaches, methods, and tools with which business processes can be better supported to improve customer service, minimize runtimes, reduce costs, and improve competition-readiness.

Minimum mandatory requirements:

- Business systems analysis experience
- Experience with SAP as a functional team lead on an implementation project including experience with ERP and industry-specific solution design, configuration, and design validation
- Knowledge and experience with standard systems lifecycle development methodologies, specifically test scenarios and management of expected vs. actual results

- Knowledge and experience with core ERP modules (version 6.0 or later)
- Knowledge and experience with industry-specific solutions.

The following knowledge, experience, and certifications may be required:

- Bachelor Degree in Computer Science
- Masters Degree in Business or Computer Science
- Experience in specific focus areas of SAP, including the core ERP modules and/or the Industry Solutions. Examples include:
 - Utilities/Customer Care System (IS-U/CCS)
 - Public Sector/Human Resources Public Sector (EA-PS/HR-PS)
 - Telecommunications
- Knowledge of SAP tools. Examples include:
 - SAP Business Workflow
 - SAP Archive Link
 - SAP IDOC Interface
 - SAP and Business Communication
- Completion of ERP Levels 1 and 2 of ERP training. Level 3 completion is a plus
- Completion of Industry-specific Solutions Levels 1 and 2 training. Level 3 completion (if available) is a plus
- SAP certification (SAP-issued certificate is preferred).

SAP Analyst Basis Administration Job Description:

Performs as a Basis Analyst Administrator conducting strong Basis team lead and systems analysis, design, and development duties.

Minimum mandatory requirements:

- Experience as an operational ERP Basis expert
- Experience with SAP as a Basis team lead on an implementation project

- Knowledge and experience with Linux process management, user administration, system configuration, file systems, backup and restore procedures, memory management, print subsystems and networking
- Knowledge and experience with database configuration, disk layout, SQL language scope, storage management, operation of DB transaction management, operation of the database log and log archiving, data backup procedures, recovery mechanisms, data indexing, and SQL access system
- Knowledge and experience with SAP HANA

The following degrees and/or certifications may be required:

- Bachelor Degree in Computer Science
- Masters Degree in Business or Computer Science
- SAP certification (SAP-issued certificate is preferred)

SAP ABAP Developer Job Description:

Performs as an SAP Analyst Programmer plus strong team lead and systems analysis, design and development duties. Performs technical functions in SAP including configuration, testing, integration, and documentation. Additional duties include SAP interface and enhancement development, data conversion and report writing.

Minimum mandatory requirements:

- Experience using ABAP/4 in a SAP ERP environment
- Specialization in Financial or Human Resources programming
- Knowledge of project planning software
- Knowledge of RULES and SCHEMAS
- Knowledge and experience with standard systems lifecycle development methodologies
- Knowledge and experience with the SAP PLM development methodology
- Knowledge of various SAP tools. Examples include:

- ABAP Workbench
- Report Painter
- SAPScript
- SAP Interactive Forms by Adobe (SIFbA)
- Knowledge and experience with concepts. Examples include:
 - CPI-C and Q-API
 - Remote Function Call (RFC)
 - ABAP Objects and OLE interfaces
 - Business Object Repository (BOR)
 - Business Application Programming Interface (BAPI)
- Knowledge and experience with core ERP modules (version 6.0 or later)
- Knowledge and experience with industry-specific solutions for utilities

The following knowledge, experience and certification may be required:

- Bachelor Degree in Business or Computer Science
- Experience in specific focus areas of SAP, including the core ERP modules and/or the Industry Solutions. Examples include:
 - Utilities/Customer Care System (IS-U/CCS)
 - Public Sector/Human Resources Public Sector (EA-PS/HR-PS) or Telecommunications
 - Completion of Levels 1 and 2 of SAP technical training. Level 3 completion is a plus
 - Completion of Industry-specific Solutions Levels 1 and 2 technical training. Level 3 completion (if available) is a plus
 - SAP certification (SAP-issued certificate is preferred)

VIII. ELECTRONIC DATA INTERCHANGE (EDI) GROUP

EDI-HL7 Analyst/Interface Developer Job Description:

Designs, builds and maintains application interfaces for exchange and retrieval of electronic

health information using HL7 interface engines and EDI translators. Tasks may include upgrading message format versions, migrating interfaces to new engines, conformance testing with trading partners, performance monitoring and error correction. May function as an expert consultant or team lead guiding the mapping and orchestration of data exchange processes; and health data integration and decision support projects.

Minimum mandatory requirements may include:

- Knowledge of Health Level 7 (HL7) standards and the Clinical Document Architecture (CDA)
- Knowledge of the Continuity of Care Document (CCD) specifications
- Knowledge of terminology and coding systems for health information (CPT, ICD10, DSM IV/5, SNOWMED, LOINC, etc.)
- Knowledge of ANSI ASC X12N and NCPDP electronic data interchange transactions required by HIPAA
- Knowledge of the DICOM standards of diagnostic imaging as used in application interfaces
- Knowledge of interoperability principles in healthcare application interfaces
- Experience developing application-to-application data exchanges in HL7 or X12 or NCPDP or DICOM message types, or combinations there of
- Experience with interface engine software and commonly used scripting languages
- Experience working directly with healthcare professionals and healthcare application software vendors

The following product specific experience, education, and professional certification may be required:

- Experience building interfaces with the Corepoint Integration Engine
- Experience building interfaces with Microsoft BizTalk Server
- Bachelor's degree in computer science or equivalent
- HL7 certifications (versions, RIM, CDA).

IX. LAKEHOUSE (Data Lake and Data Warehouse) GROUP

Lakehouse/Business Intelligence Architect Job Description:

Acts as the primary technical architect for data lake and data warehouse projects. Possesses deep technical expertise in advanced both data lake and data warehouse architectural design, cluster implementation, solution development, testing, performance tuning, deployment, and support.

Duties include:

- Translate client user requirements into technical architecture vision and implementation plan
- Design and develop the architecture for all lake house components which includes but not limited to: multi-cluster and share-data architecture, independent compute and storage resource scaling, security and access permission design, data transfer and transform strategies in ETL/ELT process flow, and data analytics techniques and technologies to identify trends and insights
- Design and implement a robust metadata service that is fundamental to data categorization and storage partitioning.
- Produce hardware specification, configuration recommendations, and a roadmap for future expansion via scale-up and scale-out
- Improve the performance and efficiency of business intelligence solutions through the use of record partitioning, file compression, data caching, and other big data techniques
- Function as a data lake liaison on data analytics and business intelligence teams.

Minimum mandatory requirements may include:

- Bachelor's degree in Computer Science or computer related field from an accredited institution OR 5 years of experience in architecting big data platform using Apache Spark, AWS EMR, Databricks, and Azure Synapse workspace
- Experience in data modeling with conceptual, logical and physical model design using tools like MS Visio Enterprise Architect
- Experience with ETL/ELT tools and developing data transformation logics in Java, Scala, or

Python.

- Knowledge of NoSQL data structure concepts in addition to traditional data warehouse design principles in STAR schema and dimensional modeling.
- Excellent verbal and written communication skills and the ability to interact professionally with a diverse group, executives, managers, and subject matter experts.

Data Transformation (ETL/ELT) Developer Job Description:

Works as a data transformation developer on a team of data analytical professionals.

Duties include:

- Oversee the implementation of new functionality, bug fixes, and change requests according to design specifications
- Perform the technical design, development, and component testing of ETL/ELT solutions
- Maintain and support current ETL/ELT code and documentation
- Schedule, execute, and monitor ETL/ELT runs and ensure that data loads complete on time
- Evaluate and recommend the use of data transformation tools
- Design and develop a framework for audit and validation of data transformation processes
- Develop data transformation reports to depict the data movement from source systems to a target warehouse environment
- Create, update and maintain system documentation
- Manage special technology projects and initiatives as assigned

Minimum mandatory requirements may include:

- Bachelor's degree in Computer Science or related field OR 5 years of experience in data transformation.
- Experience developing and maintaining data transformation components in Microsoft SSIS, PySpark, and Scala
- Knowledge and experience in ETL/ELT methodologies, Business Intelligence and Data

Warehousing principles, approaches, technologies, and architectures including the concepts, designs and usage of data lake, data warehouses, data marts, and operational data stores

- Expert skills designing, developing, tuning, debugging and deploying Apache Spark solutions, Azure Synapse workspace, Databricks, and AWS EMR
- Expert skill and experience with ETL/ELT processes and practices in a high availability VLDB (+4 TB) data lake and data warehouse environments
- Experience with Apache Airflow technology for job scheduling, monitoring, and execution.
- Experience metadata based ETL processes and the design and implementation of metadata driven solutions

Data Scientist / Data Engineer Job Description:

Acts as primary data analyst for development of data pipelines, data analysis, machine learning as well as developing forecasting or trending models using statistical methods. Interacts with Web data APIs and familiar with technologies to acquire, sync and leverage data sources on premises and in the cloud.

Duties include:

- Work in a variety of settings to build systems that collect, manage, and covert raw data into usable information for data scientists and business analysts to interpret. Make data accessible so that organizations can use it to evaluate and optimize their performance.
- Implement methods to improve data reliability and quality. Combine raw information from different sources to create consistent and machine-readable formats.
- Develop and test architectures that enable data extraction and transformation for predictive or prescriptive modeling.
- Evaluate business needs and objectives and build data systems and pipelines to conduct complex data analysis to identify trends and patterns.
- Build algorithms and prototypes to support data-driven decision-making process.
- Work with leaders across the organization to facilitate and help support business decisions.

Minimum mandatory requirements may include:

- Bachelor's degree in Data Science, Computer Engineering, Computer Science, or related field in data analytics
- Previous experience as a data engineer, a data scientist, a data architect or in a similar role
- Technical expertise with data modeling, data mining, and segmentation techniques
- Knowledge of programming languages in data analytics (e.g. Java, Scala, R, and/or Python)
- Experience with multiple types of database services, including relational database, NoSQL, graph database, and data warehouse offerings
- Excellent attention to detail & ability to multitask
- Strong analytical skills

V. CLOUD COMPUTING GROUP

Cloud Consultant/Coordinator Job Description:

Lead the Entity in planning, designing, and implementing cloud-based systems and services. May also provide ongoing support and maintenance for cloud-based systems that are in a productive environment. Closely coordinate with data owners, development operations (Dev Ops), and information security groups ensuring accurately identified and appropriately classified data.

Duties may include:

- Acting as a liaison between client and cloud service providers such as Microsoft Azure or Amazon Web Services
- Identifying relevant security measures to ensure regulatory compliance and data integrity of data processed by Entity or its agents
- Evaluating Entity of Entity's current infrastructure to determine cloud readiness for applications
- Designing, developing, testing, deploying, and maintaining applications in a cloud computing environment
- Providing support for users who have issues with their applications or storing data in the cloud

- Recommending appropriate cloud computing solutions based on needs and budget
- Consulting with the Entity to develop a roadmap for migrating to cloud applications
- Evaluating the security of a company's data in the cloud or on mobile devices
- Planning and executing migration from on premise to cloud applications

Minimum mandatory requirements include:

- Excellent communication skills
- Knowledge of cloud computing, such as knowledge of cloud computing software, how to set up cloud computing systems and how to troubleshoot cloud computing issues
- Strong business acumen in cloud computing with demonstrated experience explaining complex technology to business users and other technical staff
- Experience managing complex cloud migration or implementation projects for large organizations
- Knowledge of regulatory compliance and data integrity methodologies
- Knowledge of cloud system architecture and design
- Knowledge of the Secure (Software) Development Lifecycle and best practices pertaining to the SDLC
- Experience managing and implementing secure cloud computing and trusted cloud services

The following knowledge, experience, and certifications may be required:

- Certified Cloud Security Professional (CCSP)
- Public Sector experience
- Microsoft Certified Azure Fundamentals
- CompTIA Cloud Essentials+ Certification
- Expertise in G365 Government Microsoft 365

Cloud Administrator Job Description:

Works as a cloud administrator to maintain the infrastructure and functionality of the organization's cloud structures. Assists departments in installing their cloud services, while working alongside cloud engineers and cloud developers to ensure that all cloud services continue to function well.

Duties include:

- Manage aspects of the Entity's cloud-based applications including user access permissions
- Set up cloud-based applications according to Entity specifications and needs
- Perform knowledge transfer to Entity employees in the correct use of cloud-based applications
- Protect cloud-based applications from data breaches and/or cybersecurity threats
- Update cloud-based application security protocols
- Troubleshoot issues with cloud-based applications
- Communicate with the Entity's employees to identify organizational needs and tailor existing cloud structures to accommodate them

Minimum mandatory requirements may include:

- Unix, Linux, and Windows management experience with the ability to fully use any of the most popular operating systems to provide high-quality cloud services
- The ability to use all necessary types of databases, data storage systems, and file transfer programs
- Proven experience creating and maintaining cloud-based applications with accommodating customer specifications
- Experience implementing programs that limit the possibility of cybersecurity threats
- Experience addressing and solving issues that might be affecting cloud-based applications

Cloud Engineer Job Description:

Works as a cloud engineer to design and develop cloud infrastructures and implement policies for the use of cloud services in accordance with best practices and meet the needs of the organization and customer needs. Migrate existing on-premise applications to the cloud, and debug cloud stacks.

Duties include:

- Collaborate with IT analysts and other development team members to evaluate and identify optimal cloud solutions
- Modify and improve existing systems
- Deliver knowledge transfer to teams on the implementation of new cloud technologies and initiatives
- Design, develop, and deploy cloud-based systems
- Develop and maintain cloud solutions based on best industry practices
- Ensure efficient functioning of data storage and processing functions in accordance with Entity security policies and best practices in cloud security
- Identify, analyze, and resolve infrastructure vulnerabilities and application deployment issues
- Interact with Entity employees, provide cloud support, and make recommendations based on the Entity's needs

Minimum mandatory requirements may include:

- At least 3 years of experience in the field of cloud computing
- Azure certifications preferred
- Experience with SysOps
- Troubleshooting and analytical skills
- Good communication and collaboration skills

Cloud Developer Job Description:

Works as a software engineer or Web developer to create and support applications that are cloud native. An essential software engineer with a specialization in cloud computing who must have a solid understanding of cloud systems – not only how they operate, but how to deploy solutions securely, efficiently, and with little-to-no downtime.

Duties include:

- Use a variety of programming languages, data storage techniques, and developer tools to design, develop, and deploy dynamically scalable, available, and reliable solutions on the cloud
- Select appropriate cloud services to design, develop, and deploy applications to meet business needs and objectives
- Design and configure cloud compute services as per business needs, including setting up networking resources such as load balancers for scalability
- Assist in implementing cost-control strategy to effectively manage cloud infrastructure resources such as networks, storage, compute services etc.
- Assist in migrating complex, multi-tier, and enterprise-scale applications on cloud platforms
- Develop APIs to build, link, and integrate different workloads for applications that reside on premises, a single cloud solution, or multiple cloud platforms
- Create, update, and maintain system documentation that outlines the architecture and components used by various cloud solutions

Minimum mandatory requirements may include:

- Bachelor's degree in Systems Engineering, Computer Science, or related field OR 5 years of experience in cloud development.
- Experience with cloud systems architecture and design; have a great understanding of software as a service (SaaS), platform as a service (PaaS), and infrastructure as a service (IaaS)
- Technical expertise with one of the major cloud computing platforms: AWS, Microsoft Azure, and GCP
- Knowledge of programming languages in cloud computing (e.g. Java, C#, JavaScript, Python,

Perl, and/or Ruby)

- Knowledge and experience in API development in REST and GraphQL
- Experience with multiple types of database services, including relational database, NoSQL, graph database, and data warehouse offerings
- Knowledge of networking basics, including how to establish connections across resources and locations
- Understand DevOps and CI/CD services in the cloud

VI. RADIO SYSTEMS SUPPORT GROUP

Telecommunication Systems Technician Job Description:

Plans, designs, installs, and maintains telecommunications equipment, such as VHF/UHF/800MHz twoway portable and mobile radios, control stations and repeater stations, signaling, digital communications equipment. The Entity's radio infrastructure is Motorola equipment.

Duties include the following:

- Analyzes telecommunications equipment malfunctions and takes necessary action to restore system to service.
- Analyzes and develops tests to isolate, repair, or replace defective circuits, and parts of hand held radios, radios in vehicles, fixed equipment, and other similar end user equipment.
- Maintains and makes repairs to power supplies, battery chargers, battery supplies for portable equipment, and various electronic measuring and testing devices.
- Operates power hand tools and other equipment in the installation of mobile radios; base, control and repeater stations; and other telecommunications equipment.
- Coordinates, monitors and inspects the installation of equipment by various contractors and suppliers to insure compliance with specifications and regulations.
- Designs, installs, and maintains antennas and antenna systems.

- Maintains equipment service records, inventory records, and other logs according to Federal Communications Commission regulations; maintains electronic data library; and prepares written reports.
- Performs bit error rate and envelope delay testing of subscriber channels.
- Develops Motorola portable and mobile radio programming templates; programs mobile and portable radios using radio service software.

Minimum mandatory requirement - Three years of full-time paid experience, installing, maintaining and repairing telecommunications equipment such as wireless voice/data systems, VHF/UHF/800MHz twoway radios; base, control, and repeater stations.

Radio Systems Technician Job Description:

Ability to plan, design, install, and maintain a Motorola trunked radio infrastructure.

Duties include the following:

- Advanced theory of radio communications and electronics including microwave radio theory and operation
- Electrical and mechanical theory and operation
- 800 MHz trunked radio systems, digital microwave, DS1 and DS3 multiplexers, LAN, WAN, computer operations and various software programs
- Two-way radio communications
- Various tools and instruments used to test and repair electronic and telecommunications equipment
- Basic network systems
- Engineering practices and principles related to telecommunications and/or network systems
- Applicable federal, state, and local laws, codes, and regulations
- Industry standards related to public safety and wireless communications

Minimum mandatory requirement:

Four years of full-time paid experience implementing, maintaining, and repairing conventional and trunked radio systems such as 800 MHz trunked radio systems, digital microwave, multiplexing systems, wireless voice/data systems, and network circuits.

VII. INFORMATION SECURITY GROUP

Information Security Analyst Job Description:

Ability to develop and maintain information security policy; design security policy education, training, and awareness activities; monitor compliance with Entity IT security policy and applicable law; and coordinate investigation and reporting of security incidents. Working with the Entity IT systems support teams, the information security analyst will update and monitor the IT business continuity and disaster recovery plans and perform risk assessment reviews.

Typical duties include:

- Monitor and advise on information security issues related to the systems and workflow to ensure the internal security controls for the campus are appropriate and operating as intended.
- Coordinate and execute IT security projects.
- Coordinate response to information security incidents.
- Develop and publish Information Security policies, procedures, standards and guidelines based on knowledge of best practices and compliance requirements.
- Conduct data classification assessment and security audits and manage remediation plans.
- Collaborate with IT management, the legal department, safety and security, and law enforcement agencies to manage security vulnerabilities.
- Create, manage and maintain user security awareness.
- Prepares documentation, including department policies and procedures, security notifications, Web content, and security alerts.

Minimum mandatory requirements:

- Have a strong knowledge and depth of experience in security and risk management across a complex environment.
- Be a strong communicator able to interact with stakeholders and technology staff in a technical and non-technical manner.
- Have a strong background in developing Governance, Risk, and Compliance (GRC) Management and Risk Management frameworks.
- Have an in-depth understanding of the NIST 800 series of publications and the ability implement the recommendations in these publications.
- Have at least one of the following certifications – CISSP, CISM, CISA, or equivalent.

VIII. USER EXPERIENCE/USER INTERFACE GROUP

User Experience Designer Job Description:

UI Designer to create amazing user experiences. Produce clean and artful designs, possess superior UI skills and be able to translate high-level requirements into interaction flows and artifacts, and transform them into beautiful, intuitive, and functional user interfaces.

Duties may include some or all of the following:

- Collaborating with customers and engineering to define and implement innovative solutions for the product direction, visuals and experience
- Executing all visual design stages from concept to collaboration with engineering to implement the design.
- Conceptualizing original ideas that bring simplicity and user friendliness to complex design roadblocks
- Create wireframes, storyboards, user flows, process flows and site maps to effectively communicate interaction and design ideas
- Present and sell designs and key milestone deliverables to peers and executive level stakeholders
- Conduct user research and evaluate user feedback
- Establish and promote design guidelines, best practices and standards

The following Knowledge, experience, and certifications may be required:

- Proven UI experience
- Demonstrable UI design skills with a strong portfolio
- Solid experience in creating wireframes, storyboards, user flows, process flows and site maps
- Proficiency in Photoshop, Illustrator, or other visual design and wire-framing tools
- Proficiency in HTML, CSS, and JavaScript for rapid prototyping.
- Excellent visual design skills with sensitivity to user-system interaction
- Ability to present your designs and sell your solutions to various stakeholders.
- Ability to solve problems creatively and effectively
- Up-to-date with the latest UI trends, techniques, and technologies
- Experience working in a Custom Application Development environment

Education may be required - Human-Computer Interaction, Interaction Design, Graphic Design, or related certificate or degree.

IV. SPECIAL PROJECTS/REQUEST FOR SERVICES

On occasion, the Entity will receive requests for special projects. The Entity may, at its discretion, request proposals from vendors based on fixed price deliverables rather than on an hourly basis. In those cases, a Request For Services (RFS) will detail the method for submission of the proposal and will provide for different time frames to respond. All special projects must be reviewed and approved by the Contract & Purchasing Services Division prior to the commencement of any work. Under this RFP, individual special projects shall not exceed \$750,000.00. Projects in excess of \$750,000.00 shall require a separate RFP issued by the Contract & Purchasing Services Division or the using department/agency and shall require approval from the Board of Supervisors. Special Projects will be evaluated and awarded separately.

Selected examples where a special project approach could be employed include:

- To conduct Business Process Re-engineering Studies

- To conduct Functional Requirements Definition/Documentation
- To create and implement an interface between existing applications and Entity SAP modules
- To conduct software integration
- To conduct hardware integration
- Special consulting expertise to conduct independent enterprise systems audits for domains, security, storage, records management, etc.

This special projects category shall only be used to request services. These contracts shall not include the purchase of any products (e.g., computer hardware and Commercial off The Shelf (COTS) software).

The Vendor whose proposal is chosen shall be responsible for managing the special project, maintaining a project schedule, and compiling and managing the project team. The contracting authority will have oversight responsibility on the special project. At the time of negotiation, the Contracting Agency/Department and Vendor will negotiate project schedule, milestones, and costs. Payments on the contract will be based on milestones or progress payments. Project will not be extended to cover services not included in the original project schedule or milestones. This is for personnel service only and does not include product costs (e.g., hardware or software). The specifics for payment will be detailed in the RFS.

The following contract terms and conditions shall apply to special projects only, unless specifically excluded in the RFS issued by the requesting Contracting Agency/Department.