
RFP# VHDA-69632-08L

**Information Technology
Staff Augmentation Services
Issue Date: January 25, 2008**



Virginia Housing Development Authority

601 South Belvidere Street · Richmond, Virginia 23220-6505
(804) 782-1986

The Virginia Housing Development Authority does not discriminate on the basis of race, color, religion, sex, age, national origin, familial status, handicap or disability. VHDA does not discriminate against faith-based organizations.

REQUEST FOR PROPOSALS
#VHDA-69632-08L
Information Technology Staff Augmentation Services
Issued: January 25, 2008

Commodity Codes: 92000 Data Processing, Computer and Software Services

Issuing Authority: Virginia Housing Development Authority (VHDA)
601 S. Belvidere Street
Richmond, VA 23220

Sealed Proposals Received Until: March 7, 2008 @ 2:00 pm, eastern time

All Inquiries For Information Should Be Directed To: Barbara J. Layman, CPPB, VCO
(804) 343-5868

Period of Contract: The contract period shall be an initial five-year term with five optional one-year renewal periods.
See Section VII, Paragraph H. herein.

This Entire Bid Package Should Be Mailed To Or Hand Delivered To: Virginia Housing Development Authority (VHDA)
Attn: Barbara J. Layman, Procurement Manager
601 S. Belvidere Street
Richmond, VA 23220

In Compliance With This Request for Proposals And To All The Conditions
Imposed Herein And Hereby Incorporated By Reference, The Undersigned Offers And
Agrees To Furnish The Services In Accordance With The Attached Signed Proposal
Or As Mutually Agreed Upon By Subsequent Negotiation.

Offeror Signature: _____

Name of Firm (printed) _____

Address: _____

Telephone & Fax: _____ E-Mail: _____

FEI/FIN # _____ Date: _____

Small, Minority-Owned, Women-Owned Business: [] Yes [] No DMBE # _____

**VHDA shall make a contract award in whole or in part, whichever is deemed in the best
interest of the Authority and based on all responses received and evaluated.**

RETURN OF THIS PAGE REQUIRED

	TABLE OF CONTENTS RFP #VHDA-69632-08L	Page
I.	PURPOSE	3
II.	BACKGROUND	3
III.	SCOPE OF WORK	4
IV.	PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS	6
V.	EVALUATION AND AWARD CRITERIA	9
VI.	GENERAL TERMS AND CONDITIONS	10
VII.	SPECIAL TERMS AND CONDITIONS	16
VIII.	METHOD OF PAYMENT	21
IX.	EXHIBITS	21
	A. Contractor's Data Sheet B. Small Business Sub-Contracting Plan C. Rate Schedule D. Skills and Staffing E. Position Descriptions	

I. **PURPOSE:** Pursuant to the Virginia Public Procurement Act, The Virginia Housing Development Authority (VHDA) requests sealed proposals to establish multiple contracts, through competitive negotiations, with qualified providers for Information Technology staffing services on a temporary basis.

II. **BACKGROUND:** VHDA was established in 1972 as a political subdivision of the Commonwealth of Virginia. VHDA is governed by a Board of Commissioners, which employs the Executive Director to administer, manage and direct the affairs of VHDA. VHDA's Headquarters is located at 601 South Belvidere Street, Richmond, VA 23220. The principal purpose of VHDA is to provide mortgage loan financing for single family and multifamily housing in Virginia for occupancy by persons and families of low and moderate income.

VHDA is seeking to supplement its Information Technology professionals on an as-needed basis. Multiple contractors across many technology disciplines are desired for this effort. Our current IT technology environment includes a number of internally managed networks, server, storage area network, and PBX and VoIP telephony platforms. These currently include, but are not limited to:

1. Enterasys and Cisco LAN switching and routing hardware
2. F5 Big-IP
3. HP server hardware running:
 - Microsoft Windows Server 2003
 - Microsoft SQL Server versions 2000 – 2005
 - WebSphere DataStage
 - Cognos Business Intelligence versions 7 and 8
 - Microsoft Office SharePoint Server (MOSS)
 - Microsoft Project Server 2007
4. HP Desktop and Laptop hardware running:
 - Microsoft Office 2003
 - Microsoft XP Professional
5. HP Enterprise-class storage area networks
6. Cisco Call Manager
7. Siemens PBX w/ Expressions voice mail

Business applications range from in-house developed/maintained custom applications to third-party supplied commercial off-the-shelf (COTS) software packages and externally provided application services (ASP). Custom software technologies are currently developed with, but are not limited to:

1. Visual Basic
2. VB.Net
3. C#.Net
4. ASP.Net

5. Java Script

III. **STATEMENT OF NEEDS:** VHDA manages its contractors in the manner listed below. If the vendor cannot agree to provide contractors under these terms, the vendor **must** indicate the exceptions in the response.

- A. The duration of employment of the contract personnel shall be determined by VHDA. The vendor agrees to provide VHDA with a letter indicating the hourly rate and agreed upon starting date of the engagement.
- B. Once established, hourly rates for contract personnel shall be considered for modification in December 2008, and at VHDA's discretion.
- C. VHDA may, at its sole option, approve increases in the hourly rate for contract personnel. Such increase, if any, shall be no more than 6% annually. Under no circumstances shall an increase be awarded which results in a fee structure exceeding the agreed upon rate schedule as stated by the vendor. The fees discussed here refer to fees charged VHDA by the vendor, not the salary paid to the employee.
- D. VHDA reserves the right to **terminate its use** of unsatisfactory contract personnel at its discretion without advance notice.
- E. The vendor agrees to provide specialized invoicing according to the following criteria:
 - 1. Each vendor will submit a timesheet weekly to his or her VHDA manager for signature. Time will be recorded by task/project.
 - 2. Each vendor will deliver a copy of that signed timesheet to the vendor for billing purposes.
 - 3. Signed timesheets will accompany each invoice from the vendor. Invoices submitted without signed timesheets will not be honored.
 - 4. Vendors will invoice VHDA monthly for the services rendered in the preceding month.
- F. Proposals **must** contain a description of the vendor's ability and qualifications to provide the requested services.
- G. Proposals **must** contain a listing of recent clients and a description of the related services performed for these clients. Please provide at least five and no more than ten listings.

- H. If the vendor has the ability to provide a unified team-approach to handling Information Services initiatives, describe the method and give examples of client engagements where a team-approach was used.
- I. The vendor **must** describe its method for transferring knowledge during and at the end of an engagement.
- J. The vendor **must** provide a completed chart (see sample in **Exhibit D**) with a skills list of permanent employees versus staffing available in a résumé pool. This will allow VHDA to understand the depth and breadth of knowledge available from each vendor.
- K. VHDA is interested in the following information technology personnel:
 - 1. Network Security
 - 2. Network Services
 - 3. Desktop/Helpdesk Services
 - 4. Software Development
 - 5. Database Administration/Data Warehousing
 - 6. Project Management
 - 7. Business Analysis
 - 8. Training and Support
 - 9. Enterprise and Infrastructure Architecture
- L. The vendor **must** describe its process of how absenteeism or attrition of contract personnel is minimized. The vendor **must** also provide its annual attrition rate.
- M. The vendor **must** describe its service guarantee and customer compensation practices for unplanned absences or attrition of vendor's contract personnel assigned to VHDA.
- N. The vendor **must** describe the method used for interviewing and screening of contract personnel to be presented to a client.
- O. Office hours of the vendor **must** be provided. Names, phone numbers, and e-mail addresses of vendor contact personnel **must** be provided. The vendor **must** identify the means of contact outside of normal office hours. The vendor **must** describe its method for emergency after-hours client contact with contract personnel.
- P. The vendor **must** provide its policy/schedule relating to volume discounts.
- Q. The vendor **must** describe its process for handling staffing requests that require immediate attention.

- R. The vendor **must** provide its standard and over-time rate schedules for the types of positions in the chart in **Exhibit C**. The completed chart (**Exhibit C**) **must** be included with the vendor's proposal. (See **Exhibit E** for the general job descriptions identified in **Exhibit C**.)

IV. PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS

A. GENERAL REQUIREMENTS:

1. RFP Response: In order to be considered for selection, Offerors must submit a complete response to this RFP. One original and five copies of each proposal must be submitted to the Authority. A soft copy on CD or DVD is also requested. Offeror shall make no other distribution of the proposal.
2. Proposal Preparation:
 - a. Proposals shall be signed by an authorized representative of the Offeror. Failure to submit all information requested may result in the Authority requiring prompt submission of missing information and/or giving a lower evaluation of the proposal. The Authority may reject proposals, which are substantially incomplete or lack key information. Mandatory requirements are those required by law or regulation or are such that they cannot be waived and are not subject to negotiation
 - b. Proposals should be prepared simply and economically, providing a straightforward, concise description of capabilities to satisfy the requirements of the RFP. Emphasis should be placed on completeness and clarity of content.
 - c. Proposals should be organized in the order in which the requirements are presented in the RFP. All pages of the proposal should be numbered. **Each paragraph in the proposal should reference the paragraph number of the corresponding section of the RFP. It is also helpful to cite the paragraph number, sub letter, and repeat the text of the requirement as it appears in the RFP.** If a response covers more than one page, the paragraph number and sub letter should be repeated at the top of the next page. The proposal should contain a table of contents, which cross-references the RFP requirements. Information, which the

Offeror desires to present, that does not fall within any of the requirements of the RFP should be inserted at an appropriate place or be attached at the end of the proposal and designated as additional material. Proposals that are not organized in this manner risk elimination from consideration if the evaluators are unable to find where the RFP requirements are specifically addressed.

- d. As used in this RFP, the terms "must", "shall", "should" and "may" identify the criticality of requirements. "Must" and "shall" identify requirements whose absence will have a major negative impact on the suitability of the proposed solution. Items labeled as "should" or "may" are highly desirable, although their absence will not have a large impact and would be useful, but are not necessary. Depending on the overall response to the RFP, some individual "must" and "shall" items may not be fully satisfied, but it is the intent to satisfy most, if not all, "must" and "shall" requirements. The inability of an Offeror to satisfy a "must" or "shall" requirement does not automatically remove that Offeror from consideration; however, it may seriously affect the overall rating of the Offerors' proposal
- e. Each copy of the proposal should be bound or contained in a single volume where practical. All documentation submitted with the proposal should be contained in that single volume.
- f. Ownership of all data, materials, and documentation originated and prepared for the Authority pursuant to the RFP shall belong exclusively to the Authority and be subject to public inspection in accordance with the *Virginia Freedom of Information Act*. Trade secrets or proprietary information submitted by an Offeror shall not be subject to public disclosure under the *Virginia Freedom of Information Act*; however, the Offeror must invoke the protections of § 2.2-4342F of the *Code of Virginia*, in writing, either before or at the time the data or other material is submitted. The written notice must specifically identify the data or materials to be protected and state the reasons why protection is necessary. The proprietary or trade secret material submitted must be identified by some distinct method such as highlighting or underlining and must indicate only the specific words, figures, or paragraphs that constitute trade secret or proprietary information. The classification of an entire proposal document, line item prices, and/or total proposal

prices as proprietary or trade secrets is not acceptable and will result in rejection of the proposal.

3. Questions: Interested parties may submit written questions on any aspect of this RFP on or before 2:00 p.m. eastern time **Friday February 22, 2008**. Please submit your comments and questions to barbara.layman@vhda.com or 804-343-8665 (desktop fax).
4. Notices and Answer to Questions: All Notices as well as answers to vendor submitted questions will be provided on our website at www.vhda.com, click on RFP's, then scroll down to the "Notices." VHDA reserves the right to extend either of the foregoing deadlines or modify this Request for Proposals, as it deems necessary.
5. RFP Submittal: To be considered, ***sealed*** proposals must be received at VHDA not later than 2:00 pm. eastern time, Friday, March 7, 2008 to the contract officer and address listed on page one of this solicitation. **FAXED PROPOSALS SHALL NOT BE ACCEPTED.**
6. Oral Presentation: Offerors who submit a proposal in response to this RFP may be required to give an oral presentation of their proposal to the Authority. This provides an opportunity for the Offeror to clarify or elaborate on the proposal. This is a fact finding and explanation session only and does not include negotiation. The Authority will schedule the time and location of these presentations. Oral presentations are an option of the Authority and may or may not be conducted.

B. SPECIFIC PROPOSAL INSTRUCTIONS: Proposals should be as thorough and detailed as possible so that VHDA may properly evaluate your capabilities to provide the required services. Offerors are required to submit the following items as a complete proposal:

1. Return the RFP cover sheet and all addenda acknowledgments, if any, completed and signed as required.
2. Offeror's Data Sheet included as Exhibit A herein, and other specific items or data requested in the RFP.
3. Pricing Schedule. See Exhibit C.
4. SWaM Utilization: See Exhibit B.
5. References: Provide references in accordance with Exhibit A.

6. Proposals **must** contain a description of the vendor's ability and qualifications to provide the requested services.

V. EVALUATION AND AWARD CRITERIA:

- A. **Evaluation Criteria:** Proposals shall be evaluated using the criteria outlined below: -

	<u>Criteria</u>	<u>Point Value</u>
1.	Offeror's proposed solution to address and fulfill stated requirements	30
2.	Experience and ability in providing services of the size and scope required	30
3.	Favorable references, as required in Exhibit A	5
4.	Price (See Exhibit C).	25
5.	SWaM Utilization	10

- B. **Award Of Contract:** Selection shall be made of two or more Offerors deemed to be fully qualified and best suited among those submitting proposals on the basis of the evaluation factors included in the Request for Proposals, including price, if so stated in the Request for Proposals. Negotiations shall be conducted with the Offerors so selected. Price shall be considered, but need not be the sole determining factor. After negotiations have been conducted with each Offeror so selected, the Authority shall select the Offeror, which, in its opinion, has made the best proposal, and shall award the contract to that Offeror. The Authority may cancel this Request for Proposals or reject proposals at any time prior to an award, and is not required to furnish a statement of the reasons why a particular proposal was not deemed to be the most advantageous (*Code of Virginia*, § 2.2-4359D). Should the Authority determine in writing and in its sole discretion that only one Offeror is fully qualified, or that one Offeror is clearly more highly qualified than the others under consideration, a contract may be negotiated and awarded to that Offeror. The award document will be a contract incorporating by reference all the requirements, terms and conditions of the solicitation and the contractor's proposal as negotiated.

VI. GENERAL TERMS AND CONDITIONS:

- A. APPLICABLE LAWS AND COURTS:** This solicitation and any resulting contract shall be governed in all respects by the laws of the Commonwealth of Virginia and any litigation with respect thereto shall be brought in the courts of the Commonwealth. The Contractor shall comply with all applicable federal, state and the City of Richmond laws, codes, rules, and regulations applicable to the work to be performed at the premises.
- B. ANTI-DISCRIMINATION BY PERSONS:** By submitting their proposal, Offerors certify to the Authority that they will conform to the provisions of the Federal Civil Rights Act of 1964, as amended, as well as the Virginia Fair Employment Contracting Act of 1975, as amended, where applicable, the Virginians With Disabilities Act, the Americans With Disabilities Act and § 2.2-4311 of the *Virginia Public Procurement Act (VPPA)*. If the award is made to a faith-based organization, the organization shall not discriminate against any recipient of goods, services, or disbursements made pursuant to the contract on the basis of the recipient's religion, religious belief, refusal to participate in a religious practice, or on the basis of race, age, color, gender or national origin and shall be subject to the same rules as other organizations that contract with public bodies to account for the use of the funds provided; however, if the faith-based organization segregates public funds into separate accounts, only the accounts and programs funded with public funds shall be subject to audit by the public body. (*Code of Virginia*, § 2.2-4343.1E).

During the performance of this contract, the Contractor agrees as follows:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability or any other basis prohibited by state law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the Contractor. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this non-discrimination clause.
2. The Contractor, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, will state that such Contractor is an equal opportunity employer.
3. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting the requirements set forth herein. The Contractor

will include the provisions of the foregoing paragraphs (a), (b) and (c) in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

- C. ETHICS IN PUBLIC CONTRACTING:** By submitting their proposals, Offerors certify that their proposals are made without collusion or fraud and that they have not offered or received any kickbacks or inducements from any other Offeror, supplier, manufacturer or subcontractor in connection with their (bid/proposal), and that they have not conferred on any public employee having official responsibility for this procurement transaction any payment, loan, subscription, advance, deposit of money, services or anything of more than nominal value, present or promised, unless consideration of substantially equal or greater value was exchanged.
- D. IMMIGRATION REFORM AND CONTROL ACT OF 1986:** By submitting their proposals, Offerors certify that they do not and will not during the performance of this contract employ illegal alien workers or otherwise violate the provisions of the federal Immigration Reform and Control Act of 1986.
- E. DEBARMENT STATUS:** By submitting their proposals, Offerors certify that they are not currently debarred by the Commonwealth of Virginia from submitting bids or proposals on contracts for the type of goods and/or services covered by this solicitation, nor are they an agent of any person or entity that is currently so debarred.
- F. ANTITRUST:** By entering into a contract, the contractor conveys, sells, assigns, and transfers to the Authority all rights, title and interest in and to all causes of action it may now have or hereafter acquire under the antitrust laws of the United States and the Commonwealth of Virginia relating to the particular goods or services purchased or acquired by the Authority under said contract.
- G. CLARIFICATION OF TERMS:** Any revisions to the solicitation will be made only by addendum issued by VHDA.
- H. PAYMENT:**
1. To Prime Contractor:
 - a. If work hereunder is performed by a subcontractor, then, within seven days after receipt of amounts paid to Contractor by VHDA for work performed by the subcontractor, Contractor must either (i) pay the subcontractor for the proportionate share of the total payment received from

VHDA attributable to the work performed by the subcontractor under this contract, or (ii) notify VHDA and the subcontractor, in writing, of his intention to withhold all or a part of the subcontractor's payment with the reason for nonpayment.

- b. Contractor must provide its social security number (SSN) or its federal employer identification number (FEIN).
- c. Contractor must pay interest to all subcontractors on all amounts owed by Contractor that remain unpaid after seven days following receipt by Contractor of payment from VHDA for work performed by any subcontractors under this contract.
- d. Unless otherwise provided under the terms of this contract, interest shall accrue at the rate of one percent per month.
- e. Any payment terms requiring payment in less than 30 days will be regarded as requiring payment 30 days after invoice or delivery, whichever occurs last. This shall not affect offers of discounts for payment in less than 30 days, however.
- f. All services provided under this contract or purchase order shall be billed by the Contractor at the contract price.
- g. The following shall be deemed to be the date of payment: the date of postmark in all cases where payment is made by mail.

2. To Subcontractors:

- a. A contractor awarded a contract under this solicitation is hereby obligated:
 - i. To pay the subcontractor(s) within seven (7) days of the Contractor's receipt of payment from the Authority for the proportionate share of the payment received for work performed by the subcontractor(s) under the contract; or
 - ii. To notify the Authority and the subcontractor(s), in writing, of the contractor's intention to withhold payment and the reason.
- b. The Contractor is obligated to pay the subcontractor(s) interest at the rate of one percent per month (unless otherwise provided under the terms of the contract) on all amounts owed by the Contractor that remain unpaid seven (7) days following receipt of payment from the Authority,

except for amounts withheld as stated in (2) above. The date of mailing of any payment by U. S. Mail is deemed to be payment to the addressee. These provisions apply to each sub-tier contractor performing under the primary contract. A Contractor's obligation to pay an interest charge to a subcontractor may not be construed to be an obligation of the Authority.

- I. **QUALIFICATIONS OF OFFERORS:** The Authority may make such reasonable investigations as deemed proper and necessary to determine the ability of the Offeror to perform the services and the Offeror shall furnish to the Authority all such information and data for this purpose as may be requested. The Authority reserves the right to inspect Offeror's physical facilities prior to award to satisfy questions regarding the Offeror's capabilities. The Authority further reserves the right to reject any proposal if the evidence submitted by, or investigations of, such Offeror fails to satisfy the Authority that such Offeror is properly qualified to carry out the obligations of the contract and to provide the services and/or furnish the goods contemplated therein.
- J. **ASSIGNMENT OF CONTRACT:** A contract shall not be assignable by the Contractor in whole or in part without the written consent of the Authority.
- K. **CHANGES TO THE CONTRACT:** Changes to the contract can be made in the following ways:
 - 1. The parties may agree in writing to modify the scope of the contract. An increase or decrease in the price of the contract resulting from such modification shall be agreed to by the parties as a part of their written agreement to modify the scope of the contract.
 - 2. The Authority may order changes within the general scope of the contract at any time by written notice to the Contractor. Changes within the scope of the contract include, but are not limited to, things such as services to be performed, the method of packing or shipment, and the place of delivery or installation. The Contractor shall comply with the notice upon receipt. The Contractor shall be compensated for any additional costs incurred as the result of such order and shall give the Authority a credit for any savings. Said compensation shall be determined by one of the following methods:
 - a. By mutual agreement between the parties in writing; or
 - b. By agreeing upon a unit price or using a unit price set forth in the contract, if the work to be done can be expressed in units, and the Contractor accounts for the number of units of work performed, subject to the Authority's right to audit the

Contractor's records and/or to determine the correct number of units independently; or

3. By ordering the Contractor to proceed with the work and keep a record of all costs incurred and savings realized. A markup for overhead and profit may be allowed if provided by the contract. The same markup shall be used for determining a decrease in price as the result of savings realized. The Contractor shall present the Authority with all vouchers and records of expenses incurred and savings realized. The Authority shall have the right to audit the records of the Contractor as it deems necessary to determine costs or savings. Any claim for an adjustment in price under this provision must be asserted by written notice to the Authority within 30 days from the date of receipt of the written order from the Authority. If the parties fail to agree on an amount of adjustment, the question of an increase or decrease in the contract price or time for performance shall be resolved in accordance with the procedures for resolving disputes provided by the Disputes Clause of this contract. Neither the existence of a claim, litigation or any other provision of this contract shall excuse the Contractor from promptly complying with the changes ordered by the Authority or with the performance of the contract generally.

- L. **DEFAULT:** In case of failure to deliver goods or services in accordance with the contract terms and conditions, the Authority, after due oral or written notice, may procure them from other sources and hold the Contractor responsible for any resulting additional purchase and administrative costs. This remedy shall be in addition to any other remedies, which the Authority may have.
- M. **INSURANCE:** By signing and submitting a bid or proposal under this solicitation, the bidder or offeror certifies that if awarded the contract, it will have the following insurance coverage at the time the contract is awarded. For construction contracts, if any subcontractors are involved, the subcontractor will have workers' compensation insurance in accordance with §§ 2.2-4332 and 65.2-800 et seq. of the *Code of Virginia*. The bidder or offeror further certifies that the contractor and any subcontractors will maintain this insurance coverage during the entire term of the contract and that all insurance coverage will be provided by insurance companies authorized to sell insurance in Virginia by the Virginia State Corporation Commission.

MINIMUM INSURANCE COVERAGES AND LIMITS REQUIRED FOR MOST CONTRACTS:

1. Workers' Compensation - Statutory requirements and benefits. Coverage is compulsory for employers of three or more employees, to include the employer. Contractors who fail to notify the Commonwealth of increases in the number of employees that change their workers' compensation requirements under the *Code of Virginia* during the course of the contract shall be in noncompliance with the contract.
2. Employer's Liability - \$100,000.
3. Commercial General Liability - \$1,000,000 per occurrence. Commercial General Liability is to include bodily injury and property damage, personal injury and advertising injury, products and completed operations coverage. VHDA must be named as an additional insured and so endorsed on the policy.

N. ANNOUNCEMENT OF AWARD: Upon the award or the announcement of the decision to award a contract over \$30,000, as a result of this solicitation, the Authority will publicly post such notice on the VHDA web site www.vhda.com, for a minimum of 10 days.

O. SMOKE & DRUG-FREE WORKPLACE: During the performance of this contract, the Contractor agrees to (i) provide a drug-free workplace for the Contractor's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of the Contractor that the Contractor maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor. VHDA is a smoke-free workplace. This means that smoking is prohibited in all interior areas of all VHDA facilities, work spaces, storage areas, etc. For the purposes of this section, "*drug-free workplace*" means a site for the performance of work done in connection with a specific contract awarded to a Contractor, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the contract.

- P. NON-DISCRIMINATION OF CONTRACTORS:** An Offeror or Contractor shall not be discriminated against in the solicitation or award of this contract because of race, religion, color, sex, national origin, age, disability, faith-based organizational status, any other basis prohibited by state law relating to discrimination in employment or because the Offeror employs ex-offenders unless the Authority has made a written determination that employing ex-offenders on the contract is not in its best interest. If the award of this contract is made to a faith-based organization, and an individual who applies for or receives goods, services, or disbursements provided pursuant to this contract objects to the religious character of the faith-based organization from which the individual receives or would receive the goods, services, or disbursements, the Authority shall offer the individual, within a reasonable period of time after the date of his objection, access to equivalent goods, services, or disbursements from an alternative provider. (*Code of Virginia*, § 2.2-4343.1H).

VII. SPECIAL TERMS AND CONDITIONS:

A. PROCEDURES FOR CONSIDERATION OF CONTRACTUAL CLAIMS:

1. In the event of a claim by Contractor arising out of the performance of this contract, the Contractor shall submit to VHDA, no later than 60 days after final payment to the Contractor under the procurement contract, a written claim (hereinafter the "Written Claim") for money or other appropriate relief stating the facts and circumstances upon which the claim is based and the nature of the relief sought; provided, however, that unless the Contractor filed with VHDA a written notice of intention (hereinafter "Notice of Intent") to file such Written Claim at the time of the occurrence or at the beginning of the work upon which the claim is based, then the Contractor shall be deemed to have waived his claim. For purposes of this paragraph, the phrase "at the beginning of the work" shall mean within 7 days after any goods or services are first provided pursuant to the procurement contract, and the phrase "at the time of the occurrence" shall mean within 7 days of the first event giving rise to the claim; provided, however, that in instances where the event giving rise to the claim is an alleged wrongful omission or wrongful failure to act, the 7 day time period shall begin to run from the time that duty to act arose. For purposes of these Contractual Claims Procedures, a Written Claim and a Notice of Intent shall be deemed filed when it is received by VHDA.
2. Within 90 days of the filing of the Written Claim, VHDA shall conduct an initial meeting with the Contractor who shall have the

right to have his/her attorneys present. VHDA shall establish the date, time and place of such initial meeting and shall give notice to the Contractor of such meeting at least 17 days prior thereto. (Such notice may be written or oral and shall be deemed to be given when received by the Contractor.) Failure by VHDA to initially meet with the Contractor within said 90 days shall be deemed a denial of the Contractor's claim. If deemed necessary by VHDA, additional meetings with the Contractor shall be held by VHDA subsequent to said initial meeting. Such additional meetings may be held after the expiration of the above-described 90-day period. Failure by the Contractor to attend any meetings under this paragraph (b) shall be deemed a waiver of the Contractor's claim. The Contractor shall have the burden of proof with regard to the claim. The Contractor and his/her attorneys shall have the right to present witnesses, documents and other evidence in support of the claim. At each such meeting, VHDA shall be represented by the Executive Director or a person appointed by the Executive Director. VHDA shall also have the right to have its attorneys present at each meeting and to present witnesses, documents and other evidence in support of the claim.

3. All such meetings shall be conducted on an informal basis, and the rules of evidence shall not apply. Witnesses shall not be sworn, nor shall recordings or transcripts be taken or made of any meeting. VHDA and the Contractor may agree to record or transcribe any meeting, however, such recording or transcript shall be admissible in any court or any other tribunal unless the written agreement shall expressly so provide.
4. Within 60 days after all such meetings have been completed, the Executive Director, or any person appointed by the Executive Director, shall present his/her recommendation regarding such claim in writing to VHDA's Board of Commissioners (hereinafter the "Board"). The Contractor shall have the right to receive a copy of said recommendation. Within 75 days after the Executive Director or her appointee submits said recommendation to the Board, the Board shall render its decision in writing with regard to the claim. In the event that the Executive Director, or any person appointed by the Executive Director, does not present his/her recommendations within said 60-day period or in the event that the Board does not render such decision within said 75-day period, the Contractor's claim shall be deemed to have been denied. Nothing herein shall preclude the Executive Director or any person appointed by the Executive Director from conducting informal negotiations with the Contractor on the claim or from settling the claim.

5. The decision of the Board shall be final and conclusive unless the Contractor appeals within six months of the final decision on the claim by the Board by instituting legal action as provided in § 2.2-4364 of the Virginia Public Procurement Act.
6. The provisions and procedures set forth in this Section VII(A) may be modified or amended by written agreement between the Contractor and VHDA.
7. Procedures set forth herein shall apply only to disputes arising out of the performance of a procurement contract and of a contractual nature. They shall not apply to disputes arising out of or relating to any other matters, including but not limited to, any of the following:
 - a. disqualification of bidders or Offerors from participation in the bidding or competitive negotiation process;
 - b. withdrawal of proposals; or
 - c. disputes concerning the award or proposed award of contracts.

B. INDEMNIFICATION REQUIREMENTS:

1. The Offeror shall defend, indemnify, and save the Authority harmless from any loss or damage to property or any injury to or death of an employee or anyone else of the Authority arising out of the performance of this contract, excepting negligence or willful act of the Authority.
2. The Offeror agrees to defend, hold harmless and indemnify the Authority from and to maintain liability insurance protecting the Authority from any liability for the acts of the Offeror, including but not limited to, personal injury, property damage, defamation of character, and contractual and workmen's compensation.

C. CONFIDENTIALITY - USE OF INFORMATION PROVIDED TO OFFEROR:

The information (other than information made available by VHDA to the public) provided to the Offeror by VHDA is considered confidential and exclusively for the use of VHDA. The Offeror's staff members are not authorized to disclose such information or their opinions and findings in connection therewith to any person not employed by the Offeror or VHDA unless Offeror(s) has received VHDA's approval to do so. Any documents (other than documents made available by VHDA to the public) received from or produced for VHDA shall not be disseminated by Offeror(s) to any

person not employed by Offeror(s) unless VHDA approves such dissemination.

- D. AUDIT:** The Contractor shall retain all books, records, and other documents relative to this contract for five (5) years after final payment, or until audited by the Authority, whichever is sooner. The Authority, its authorized agents, and/or state auditors shall have full access to and the right to examine any of said materials during said period.
- E. CANCELLATION OF CONTRACT:** The Authority reserves the right to cancel and terminate for its convenience any resulting contract, in part or in whole, without penalty, upon 60 days written notice to the Contractor. Any contract cancellation notice shall not relieve the Contractor of the obligation to deliver/perform on all orders issued prior to the effective date of cancellation.
- F. IDENTIFICATION OF PROPOSAL ENVELOPE:** Proposals may be hand delivered or mailed/shipped to the designated location in the office issuing the solicitation. No other correspondence or other proposals should be placed in the envelope. The signed proposal should be returned in a separate envelope or package, sealed and identified with the following information:
- Name and address of Offeror
 - RFP number, title, due date and time.
 - Name of Contract Officer listed on page 1 herein.
- G. RENEWAL OF CONTRACT:** This contract may be renewed by VHDA for four successive one year periods under the terms and conditions of the original contract except as stated in 1. and 2. below. Price increases may be negotiated only at the time of renewal. Written notice of VHDA's intention to renew shall be given approximately 90 days prior to the expiration date of each contract period.
1. If VHDA elects to exercise the option to renew the contract for an additional one-year period, the contract price(s) for the additional one year shall not exceed the contract price(s) of the original contract increased/decreased by more than the percentage increase/decrease of the "Other Services category of the CPIW section of the Consumer Price Index of the United States Bureau of Labor Statistics for the latest twelve months for which statistics are available.
 2. If during any subsequent renewal periods, VHDA elects to exercise the option to renew the contract, the contract price(s) for the subsequent renewal period shall not exceed the contract price(s) of

the previous renewal period increased/decreased by more than the percentage increase/decrease of the “Other Services” category of the CPI-W section of the Consumer Price Index of the United States Bureau of Labor Statistics for the latest twelve months for which statistics are available.

- H. **SUBCONTRACTS:** No portion of the work shall be subcontracted without prior written consent of VHDA. In the event that the Contractor desires to subcontract some part of the work specified herein, the Contractor shall furnish the Authority the names, qualifications and experience of their proposed subcontractors. The Contractor shall, however, remain fully liable and responsible for the work to be done by its subcontractor(s) and shall assure compliance with all requirements of the contract.
- I. **SMALL BUSINESS SUBCONTRACTING and/or EVIDENCE OF COMPLIANCE:** Where it is practicable for any portion of the awarded contract to be subcontracted to other suppliers, the contractor is encouraged to offer such subcontracting opportunities to small businesses. This shall include DMBE-certified women-owned and minority-owned businesses when they have received DMBE small business certification. If small business subcontractors are used, the prime contractor agrees to report the use of small business subcontractors by providing the purchasing office at a minimum the following information: name of small business, phone number, total dollar amount subcontracted, category type (small, women-owned, or minority-owned), and type of product/service provided. See Exhibit B.
- J. **CONFIDENTIALITY:**
1. **Confidentiality (VHDA):** VHDA agrees that neither it nor its employees, representatives, or agents shall knowingly divulge any proprietary information with respect to the operation of the software, the technology embodied therein, or any other trade secret or proprietary information related thereto, except as specifically authorized by the contractor in writing or as required by the Freedom of Information Act or similar law. It shall be the contractor's responsibility to fully comply with § 2.2-4342F of the *Code of Virginia*. All trade secrets or proprietary information must be identified in writing and conspicuously labeled as “proprietary” either prior to or at the time of submission to VHDA.
 2. **Confidentially (Contractor):** The contractor assures that information and data obtained as to personal facts and circumstances related to patients or clients will be collected and held confidential, during and following the term of this agreement,

and will not be divulged without the individual's and the agency's written consent. At close of business relationship with offeror, offeror agrees to provide all data collected and hosted on it's systems to VHDA. Once data has been provided to VHDA, the offeror will certify that the data proprietary to VHDA is removed fully from offeror's systems using methods acceptable to VHDA. Contractors and their employees working on this project will be required to sign the Confidentiality statement in this solicitation.

- K. **OBJECTION TO TERMS:** An offeror may object in writing to any term(s) or condition(s) in this proposal. Such objection shall be an attachment to the offeror's proposal, signed by a representative of the offeror, and list by section (either standard or special terms and conditions) and letter(s) of the term(s) or condition(s). The offeror shall propose an alternate form, acceptable to the offeror, of each term or condition objected to. The Authority will discuss the differences about terms and conditions with firms selected for the negotiation phase. Any modification of terms proposed as a result of negotiations must be approved by the Procurement and Legal Departments of the Authority before they are included in the contract. The Authority reserves the right to state that the content of any term or condition is non-negotiable.

- VIII. **METHOD OF PAYMENT:** Contractor shall provide monthly year-to-date account analysis statements detailing, at minimum, services provided for each Demand Deposit Account, contracted prices for services and associated volumes. Contractor shall invoice the Authority on an annual basis for each calendar year. The invoice shall be mailed or e-mailed to the Investment Department or available on line. Contractor shall provide monthly statement of activity and associated fees, if any, for each custody account.

IX. **ATTACHMENTS:**

Exhibit A	Contractor Data Sheet
Exhibit B	Small Business Sub-Contracting Plan
Exhibit C	Rate Schedule
Exhibit D	Skills & Staffing Chart
Exhibit E	Position Descriptions

**EXHIBIT A
CONTRACTOR DATA SHEET**

1. **QUALIFICATIONS OF OFFEROR:** The Offeror must have the capability and capacity in all respects to fully satisfy all of the contractual requirements. The Offeror's signature on the cover of this solicitation indicates that the Offeror certifies such.

2. **YEARS IN BUSINESS:** Number of years in business providing the types of services described in this solicitation _____Years _____Months. Year business organized _____

3. **TYPE OF BUSINESS:** This information is requested for informational purposes only. Please indicate if your firm is one or more of the following:

☐ SMALL BUSINESS
☐ WOMAN-OWNED BUSINESS
☐ MINORITY-OWNED BUSINESS
☐ SHELTERED WORKSHOP

☐ INDIVIDUAL BUSINESS
☐ SOLE PROPRIETORSHIP
☐ PARTNERSHIP
☐ CORPORATION

4. **REFERENCES:** Provide a list of at least 5 current references, for services performed on similar projects as specified in Section II. Include the length of service, year contract was entered into, and the name and address of the person the Agency can contact to verify the Contractor's qualifications. Such listing shall be comprehensive of your firm's customer base.

COMPANY NAME AND CONTACT	ADDRESS	PHONE NUMBER	SERVICES DELIVERED

**DOCUMENTATION/INFORMATION REQUESTED ON THIS PAGE
MUST BE PROVIDED IN THE OFFERORS PROPOSAL OR THE
PROPOSAL MAY BE REJECTED BY VHDA. OFFEROR MAY
RETURN THIS PAGE, COMPLETED, TO SATISFY THIS REQUIREMENT.**

EXHIBIT B - SMALL BUSINESS SUBCONTRACTING PLAN

Definitions

Small Business: "Small business " means an independently owned and operated business which, together with affiliates, has 250 or fewer employees, or average annual gross receipts of \$10 million or less averaged over the previous three years. Note: DMBE-certified women- and minority-owned businesses shall also be considered small businesses when they have received DMBE small business certification.

Women-Owned Business: Women-owned business means a business concern that is at least 51% owned by one or more women who are citizens of the United States or non-citizens who are in full compliance with United States immigration law, or in the case of a corporation, partnership or limited liability company or other entity, at least 51% of the equity ownership interest is owned by one or more women who are citizens of the United States or non-citizens who are in full compliance with United States immigration law, and both the management and daily business operations are controlled by one or more women who are citizens of the United States or non-citizens who are in full compliance with the United States immigration law.

Minority-Owned Business: Minority-owned business means a business concern that is at least 51% owned by one or more minority individuals or in the case of a corporation, partnership or limited liability company or other entity, at least 51% of the equity ownership interest in the corporation, partnership, or limited liability company or other entity is owned by one or more minority individuals and both the management and daily business operations are controlled by one or more minority individuals.

All small businesses must be certified by the Commonwealth of Virginia, Department of Minority Business Enterprise (DMBE) to participate in the SWAM program. Certification applications are available through DMBE online at www.dmbv.virginia.gov (Customer Service).

Bidder/Offeror Name: _____

Preparer Name: _____ **Date:** _____

Instructions:

- A. If you are certified by the Department of Minority Business Enterprise (DMBE) as a small business, complete only Section A of this form. This shall include DMBE-certified women-owned and minority-owned businesses when they have received DMBE small business certification.
- B. If you are not certified by DMBE as a small business and plan to subcontract part of this contract with a DMBE certified business, complete only Section B of this form.
- C. If you are not certified by DMBE as a small business and cannot identify any subcontracting opportunities to subcontract part of this contract with a DMBE-certified business, only provide the information requested in Section C of this form.

Section A: If your firm is certified by the DMBE, **check only one below:**

_____ Small Business

_____ Small and Women-owned Business

_____ Small and Minority-owned Business

Certification number: _____ **Certification date:** _____

Section B: Populate the table below to show your firm's plans for utilization of DMBE-certified small businesses in the performance of this contract. This shall include DMBE-certified women-owned and minority-owned businesses that meet the small business definition and have received the DMBE small business certification. Include plans to utilize small businesses as part of joint ventures, partnerships, subcontractors, suppliers, etc.

Small Business Name & Address DMBE #	Status if Small Business is also: Women (W), Minority (M)	Contact Person, Telephone & Email	Type of Goods and/or Services	Planned Contract Involvement	Planned Annual Contract Dollar Expenditure Amount
Totals \$					

Section C: Respond to how your business has met or exceeded at least two of the following indicators within the past 24 months. You may include any good faith efforts made regarding this procurement.

1. Identify areas of work your business has subcontracted to DMBE-certified small businesses for other contracts. Include company names, dates, dollar amounts, and percentages, per contract.
2. List research efforts conducted by your business in the past to locate DMBE-certified small businesses by advertising in publications or in the classified section of the newspaper where small businesses are likely to see it. List specific publications and dates.
3. List small business outreach meetings, conferences, or workshops conducted by your firm to locate DMBE-certified small businesses—including the dates, participation numbers, and results.
4. Provide documented correspondence (i.e., certified mail, email, receipt of fax transmissions, etc.) to small businesses from the lists provided by DMBE and other outreach agencies and organizations which indicates your solicitation of such for utilization of subcontracting opportunities on other contracts for which your business has competed.
5. List areas of work that your business has subcontracted with DMBE-certified small businesses for upcoming contracts—including the name of the business, certification number, dates, dollar amounts, and percentages on a per contract basis.
6. Provide documentation of any assistance offered to interested small businesses in obtaining bonds, lines of credit, and/or insurance for any present or past contracts your business has in place.
7. Provide documentation of follow-up on initial contacts with DMBE-certified small businesses (e.g., telephone call logs, emails, certified letters, etc.). Be sure to list the small business name and dates of contact.

EXHIBIT C – RATE SCHEDULE

This chart **must be** completed and included with the vendor's proposal. (See **Exhibit E** for a sample of the general job descriptions.) Enter the standard and over-time rate schedules for each position. Flat rates or rate ranges are acceptable.

Position Title	Additional Information	Experience Required	Standard Hourly Rate	Over-time Hourly Rate
Business Applications Administrator		3 years		
Software Developer (VB, ASP, C#, .Net)		3 years		
Senior Software Developer (VB, ASP, C#, .Net)		5 years		
Web Administrator (IIS)		3 years		
Web Systems Engineer		3-5 years		
Business Analyst		5 years		
Senior Business Analyst		10 years		
Network Security Administrator		4 years		
Systems Administrator (Windows Server)		3 years		
Senior Systems Administrator (Windows Server)		5 years		
Systems Administrator (UNIX)		3 years		
Network Engineer		3 years		
Senior Network Engineer		5 years		
PC Support Analyst		2 years		
Senior PC Support Analyst		5 years		
Project Manager		5 years		
Senior Project Manager		10 years		
Technical Writer		3 years		
Database Administrator (SQL Server)		2 years		
Senior Database Administrator (SQL Server)		6 years		
Data Architect		3 years		
ETL Developer		2 years		
Infrastructure Architect		4 years		

EXHIBIT D SKILLS AND STAFFING

The vendor **must** provide a completed chart according to the format below. The vendor may add additional categories. The vendor is expected to populate each category with skills and staffing information relevant to each category.

The vendor **must** provide the total number for the following:

Number of Permanent Staff in the Central Virginia Region: _____

Number of Permanent Staff Enterprise-wide: _____

Category	# of On-Staff Personnel in the Central Virginia Region	# of On-Staff Personnel Nationwide or Worldwide	# Available in Résumé Pool (Not on Staff Currently)
Network Security			
Sample Skill: Firewall Administration (CheckPoint)			
Sample Skill: Security Threat/Risk Assessment			
Sample Skill: Additional Skills Provided by Vendor			
Sample Certifications: Cisco Certified Systems Engineer			
Network Services			
Sample Skill: Web Systems Administration			
Sample Skill: Windows Application Administration			
Sample Skill: Citrix Administration/Network Administration			
Sample Skill: Directory Services			
Sample Skill: Additional Skills Provided by Vendor			
Sample Certifications: Cisco Certified Systems Engineer			
Sample Certifications: MS Certified Systems Engineer (MCSE)			
Desktop Services			
Sample Skill: PC Support Analyst			
Sample Skill: Support Magic Administration			
Sample Skill: Additional Skills Provided by Vendor			
Sample Certifications: A+ Certification			
Software Development			
Sample Skill: VB.Net Developer			
Sample Skill: VB Programmer Analyst			
Sample Skill: ASP Programmer			
Sample Skill: Additional Skills Provided by Vendor			
Sample Certifications: MS Certified Solutions Developer (MCSD)			
Database Administration/Data Warehousing			

Sample Skill: Cognos Report Writer			
Sample Skill: Stored Procedure Writing			
Sample Skill: SQL Administrator			
Sample Skill: Additional Skills Provided by Vendor			
Sample Certifications: MS Certified DB Administrator (MCDBA)			
Project Management			
Sample Skill: Project Manager			
Sample Skill: Additional Skills Provided by Vendor			
Sample Certifications: PMI's PMP Certification			
Training and Support			
Sample Skill: Technical Writer			
Sample Skill: Project Facilitator			
Sample Skill: Additional Skills Provided by Vendor			
Sample Certifications: Certified Professional Facilitator (CPF)			
Enterprise and Infrastructure Architecture			
Sample Skill: Modeling and Network Architecture			
Sample Skill: Security, Application, or Information Architecture			
Sample Skill: Additional Skills Provided by Vendor			
Additional Vendor-supplied Categories			
Sample Skill:			
Sample Skill:			

EXHIBIT E

POSITION DESCRIPTIONS

SOFTWARE DEVELOPER

Position Purpose

The Software Developer develops procedures for the solution of well-defined, routine business problems. The Software Developer converts these procedures into applications and programs required for computer solutions.

Problems and Challenges

The Software Developer is challenged with developing program procedures to process complex systems with a high level of reliability and execution of speed.

Essential Position Functions

Sample Accountabilities

1. Under general supervision, maintains and modifies existing applications program. Writes new programs of moderate complexity and scope, working with basic applications systems designs and specifications, while utilizing standard procedures and techniques.
2. Under somewhat closer supervision, may assist higher-level programmers in the development of complex programs. Work assignments at this level are aimed more at production than at training. All work is subject to approval from higher levels.
3. Competent to work on routine, well-defined, analysis-type problems related to a single activity or procedure, and having some variety and/or moderate difficulty.
4. Some evaluation of data or originality may be required.
5. Independently works on computer programs, usually dealing with routine record-keeping types of operations.
6. Can prepare programs requiring a wide variety and extensive number of internal processing actions.
7. Participates in certain aspects of user consulting, systems analysis, general systems design, vendor contracts and detail systems design.
8. Learns user functions, organization and role in the company to the extent required.

Authority

- Develops analysis and design of systems and/or programs.
- Documents program code.
- Assists subordinates with debugging whenever necessary.

Job Contacts

Within the IT organization, routine contact is required with IT managers at all organizational levels. Within the business, periodic contact is required with executives in charge of the key business units who use IT services.

Job Specifications

- College graduate with degree in Computer Science or related technical field desirable.
- Three or more years of related work experience with business applications.
- Experience with large-scale tape and disk-oriented systems preferred, and knowledge of database/data communications desirable. Must be able to work well with others.
- Should possess good communication skills, both verbal and written.

Business Applications Systems Administrator

Position Purpose

The BA Systems Administrator works principally with his/her assigned business unit to provide primary technical support for business specific applications and is considered an expert on supported applications and the business process the system supports. This person is responsible for assisting with systems design, testing, documentation, implementation, training, trouble shooting and maintenance and has full business knowledge of assigned areas with expert understanding of technical applications.

Essential Position Functions

- Provide technical support for business specific applications
- Keep abreast of updates and changes to business specific applications and ensure the technology stays current and vendor and/or platform supported
- Assist in overall implementation and execution of projects and performance criteria
- Research and advise on options, risks, costs vs. benefits, and impact on other business processes
- Assist in coordination of multi-system solutions to clarify interdependencies so that systems appear seamless to customers
- Coordinate technology changes with business areas
- Handle ad hoc reports for business areas
- Train business area staff to use business applications

Job Contacts

Works closely with business area staff and management, ITS staff and immediate management and outside vendors for supported business applications.

Job Specifications

- Bachelor's degree or equivalent
- Three or more years experience in the role of business applications support
- Strong analytical, conceptual and problem solving skills
- Solid verbal and written communication skills; expertise in setting and managing customer expectations

SENIOR SOFTWARE DEVELOPER

Position Purpose

The Senior Software Developer develops procedures for the solution of a variety of well-defined business problems, or for segments of complex and difficult problems or systems. The Senior Software Developer plans the computations or processes necessary for computer solutions.

Problems and Challenges

The Senior Software Developer is challenged with developing program procedures to process complex systems with a high level of reliability and execution of speed.

Essential Position Functions

1. Works independently on routine assignments. Receives instructions and guidance on more complex assignments. Independently programs segments of complex problems. Utilizes some evaluation of originality, but within accepted standard practices. Performs more difficult tasks under close supervision. All work is usually reviewed by higher-level personnel or supervisor for accuracy of judgment applied and compliance with instructions. Usually has limited responsibility for the work of others.
2. Performs some or all of the duties required of a Software Developer as necessary to complete assignments.
3. Prepares charts, tables, and logic diagrams needed in problem analysis.
4. Develops complete descriptions of all specifications required.
5. Additionally, develops common operations that can be reused.
6. Devises data verification methods and standard systems procedures.
7. Advises appropriate personnel on the implications of new or revised systems.
8. Participates in certain aspects of user consulting, systems analysis, general systems design, vendor contracts, and detail systems design.
9. Learns user functions, organization and role in the company to the extent required.

Authority

- Develops analysis and design of systems and/or programs.
- Generates program code.
- Documents program code.
- Assists subordinates with debugging whenever necessary.

Job Contacts

Within the IT organization, routine contact is required with IT managers at all organizational levels. Within the business, periodic contact is required with executives in charge of the key business units who use IT services.

Job Specifications

- College graduate with degree in Computer Science or related technical field desirable.
- Five or more years of related work experience with business applications.
- Experience with large-scale tape and disk-oriented systems preferred, and knowledge of database/communications desirable. Must be able to work well with others.
- Should possess good communication skills, both verbal and written.

WEB ADMINISTRATOR

Position Purpose

The Web Administrator maintains overall management authority for bringing together all the resources involved in developing and supporting Web presence for the Authority. This person facilitates and coordinates all the components of a successful Internet, Intranet, and Extranet. The Web Administrator is charged with ensuring that the direction of Web development is in concert with and represents the strategic business direction of the Authority in technical, communications, and general business areas.

Problems and Challenges

The Web Administrator is challenged with developing and supporting Web resources with a high level of reliability and execution of speed.

Essential Position Functions

Sample Accountabilities

1. Facilitates and coordinates the use of good project management practices and VHDA-accepted Web authoring tools in development of Web products.
2. Develops an authority-wide plan for the maintenance of Web products.
3. Determines training needs for the identified roles and responsibilities of the participants in the Web development/maintenance process.
4. Provides assessment and analysis to senior management concerning business requests for specific Web applications.
5. Recommends to senior management improvements to Web presence, integration of the Web with other means of doing business, and integration of the Web with other technology initiatives.

Job Contacts

Within the IT organization, routine contact is required with IT managers at all organizational levels. Within the business, contact is required with executives in charge of the key business units who use IT services and associates involved with Web applications.

Job Specifications

- Bachelor's degree or equivalent
- Three or more years of experience
- Exercise of independent action within defined parameters for the area of specialty
- An understanding of organizational relationships within the Authority

WEB DESIGNER

Position Purpose

The Web Designer is the person primarily responsible for designing, producing and maintaining high quality web content in accordance with VHDA's content standards. They will also play a pivotal role in establishing and coordinating the integration of VHDA's internal and external websites. The Web Designer ensures that the approach to designing and integrating websites is consistent with customer needs and corporate identity branding standards; produces a professional, consistent, user-friendly experience; provides organized, current, and accurate information; meets best practice in grammatical and stylistic standards; meets federal, state, and VHDA security and privacy standards; and incorporates the collection, analysis, and reporting of performance data regarding the use and integration of web systems.

Problems and Challenges

The Web Designer is challenged with assisting in the development and implementation of VHDA's short- and long-term web strategy, and in ITS projects related to VHDA's web environment. .

Essential Position Functions

Sample Accountabilities

- Collecting, analyzing, and reporting data regarding customer requirements, expectations, satisfaction, and usage regarding VHDA's websites
- Designing, writing and producing web content that is consistent with VHDA's website design and content management standards
- Test graphical user interfaces and navigation for usability
- Produce templates and other tools that facilitate the development of applications with high quality, consistent look and feel
- Manage content changes throughout the development process to ensure customer requirements are satisfied and governance processes are followed
- Provide input during website-related planning and project management processes regarding design parameters, work flow, scheduling, and other web-related issues
- Continuously identify improvements to content and design standards to keep VHDA websites professional, current, and to ensure a high level of design and coding efficiency

Support the troubleshooting, resolution, maintenance, upgrading, and escalation of web-related problems

- Research best practices, current web technology tools and trends, and ways to use these to improve VHDA's web systems and infrastructure in a cost-effective manner

Job Contacts

Within the IT organization, routine contact is required with IT managers at all organizational levels. Within the business, contact is required with executives in charge of the key business units who use IT services and associates involved with Web applications, and business unit content owners.

Job Specifications

- Bachelor's degree in Computer Science, Design, Human Factors, or related experience
- At least three years of Web design experience preferred.
- Experience with MOSS a plus
- Knowledge and understanding of current authoring languages, editing and authoring tools, and related web and graphic design technologies, such as Dreamweaver, Adobe Photoshop, HTML, CMS, CSS.

WEB SYSTEM ADMINISTATOR

Position Purpose

The Web System Administrator is responsible for implementing and tuning system level tools in support of the Web presence for the Authority. This person will install and configure various tools and software systems. The Web System Engineer is charged with ensuring that the web platform supports the needs of the web programmers and the web administrators.

Problems and Challenges

The Web System Administrator is challenged with implementing supporting evolving web tools with a high level of reliability. This will include the tuning of existing technologies and the implementation of new technologies.

Essential Position Functions

Sample Accountabilities

1. Implementation of technologies to support digital signatures via the web.
2. Work with programmers and database staff on resolution of web performance issues.
3. Implementation of purchased package to support targeted content on internet site.
4. Determines training needs for the identified roles and responsibilities of the participants in the Web development/maintenance process.
5. Recommends to senior management improvements to Web presence, security, integration of the Web with other means of doing business, and integration of the Web with other technology initiatives.

Job Contacts

Within the IT organization, routine contact is required with developers, system administrators, database administrators and IT managers at all organizational levels. Within the business, contact is required with web coordinators and content providers.

Job Specifications

- Bachelor's degree or equivalent
- Microsoft Certification Preferred (MCSE, MCSD etc.)
- Three or more years of experience
- Exercise of independent action within defined parameters for the area of specialty
- An understanding of IIS, SQL Server, Visual Basic, ASP, COM

SENIOR BUSINESS ANALYST

Position Purpose

The Business Analyst (SBA) is responsible for ensuring that the requirements of the business clients are captured and documented correctly before a solution is developed and implemented.

Problems and Challenges

If requirements are not captured and documented, the SBA is accountable. If the solution meets the documented requirements, but the solution still does not adequately represent the requirements of the client, the SBA is accountable.

Essential Position Functions

- Analyzing and understanding the "current state" processes to ensure that the clients and project team understand the context and implications of change.
- Developing an understanding of how present and future business needs will impact the solution.
- Identifying the sources of requirements and understanding how roles help determine the relative validity of requirements.
- Developing a Requirements Management Plan and disseminating the plan to all stakeholders.
- Identifying and documenting all business, technical, product and process requirements.
- Working with the client to prioritize and rationalize the requirements.
- Helping to define acceptance criteria for completion of the solution.

Sample Accountabilities

1. Serve as a consultant to the company in work measurement, system studies or cost-effectiveness analysis.

2. Develop divisional / departmental work / process flow definitions.
3. Provide assistance as required to organizations outside of the company to improve internal procedures that may be advantageous to the company.
4. Conduct training sessions to implement new or improved systems and procedures.
5. Conduct meetings on all levels of management for purposes of presentations, reviews, approvals of recommendations, etc.
6. Assume additional responsibilities as assigned.
7. Periodically recognize and identify potential areas where existing business services' policies and procedures require change, or where new ones need to be developed, and make recommendations in these areas.

Job Contacts

Within the IT organization, routine contact is required with IT managers at all organizational levels. Within the business, periodic contact is required with project team members.

Job Specifications

- This position requires a BS or BA level degree in Computer Science, Business Administration, Operations Engineering or related field.
- Ten or more years of experience.
- Previous experience in areas of Eliciting Requirements, Creating the Business Requirements Document, Structured Analysis, Object-Oriented Analysis, Testing, End-User Support, IT fluency, and Business Process Modeling and Re-Engineering
- Excellent verbal and written communication skills, including active listening skills.
- Extremely well organized with the capability of knowing good processes to complete the work required for the project.
- Effective relationship building with clients in order to develop joint vision for the project.
- Assisting the PM by managing client expectations through careful and proactive communications regarding requirements and changes.
- Effective negotiating skills in order to build a final consensus on a common set of requirements from all clients and stakeholders.
- Ensuring that stakeholders know the implications of their decisions and providing options and alternatives when necessary.

- Eliciting Requirements
- Creating the Business Requirements Document
- Structured Analysis
- Object-Oriented Analysis
- Testing
- End-User Support
- IT fluency
- Business Process Modeling and Re-Engineering

NETWORK SECURITY ADMINISTRATOR

Position Purpose

Works under the direction of the Data Security Administrator to design, test, install, and maintain technical security software/hardware for VHDA's computer systems and networks. Responsibilities will also include researching and addressing security threats to, and vulnerabilities in, VHDA's technical and operating systems software.

Problems and Challenges

The Network Security Administrator will be required to develop and maintain efficient and effective technical security solutions in a variety of complex systems platforms, while at the same time maintaining compatibility and integration with existing Information Technology systems and strategies. The ability to work well with other highly-skilled technical staff will be essential, as well.

Essential Position Functions

Sample Accountabilities

1. Maintains existing security systems and programs, including documentation.
2. Develops and administers data processing security systems and procedures. Includes Internet firewalls, anti-virus software, security log monitoring and reporting, and operating system security settings.
3. Resolves system errors or failures. Involves identifying system problems and implementing corrective actions. Problems addressed include hardware, software, and procedures.
4. Researches, evaluates, and recommends changes in hardware, software, data communications and techniques that contribute to more effective automated systems capabilities. Includes developing new systems applications for microcomputers.
5. Installs hardware and/or software. Performs upgrades and migrations.
6. Collects data and evaluates the performance of data processing systems. Fine tune systems as required.
7. Assists in investigating and resolving security breaches/incidents. Includes hacker and virus detection and prevention.
8. Develops and runs programs that change data format to make them compatible with other formats.

Job Contacts

The Network Security Administrator must possess the skills to understand user and technical descriptions of various system and security problems. This individual must have the ability to establish and maintain effective working relationships with others and to secure co-operation in difficult work situations. This individual must possess the skills to communicate effectively not only in writing, but also verbally.

Job Specifications

- Any combination of education and experience equivalent to graduation from an accredited college or university with major course work in Computer Engineering, Computer Science, or Information Systems.
- Four or more years of experience.
- Considerable experience in systems and network administration, including problem resolution and trouble-shooting. Experiences focused in the following domains of information security is highly desirable:
 1. access control
 2. cryptography
 3. computer architecture
 4. computer operations security
 5. application program & database security
 6. communications security
 7. security policies, standards & organization
- Extensive knowledge of data processing, hardware, and software; especially in the areas of firewall design and administration, internet security tools, and anti-virus software.
- The ability to analyze and diagnose complex systems, network, and security issues.
- The ability to recommend and implement resolutions to security problems.

SYSTEMS ADMINISTRATOR (Windows Server, UNIX)

Perform difficult professional and intermediate administrative work in the overall co-ordination, control and maintenance of computers within the Authority to ensure compatibility and integration with Information Technology strategies.

Essential Position Functions

Sample Accountabilities

1. Administers local area networks, plans network capacity, and documents all areas concerning LAN operations, maintenance, and disaster recovery.
2. Plans and co-ordinates the purchase, installation and implementation of computer hardware and software according to departmental standards and procedures.
3. Analyzes training needs of computer clients.
4. Maintains software and hardware registration and inventory to provide upgrades as necessary and ensures that appropriate security levels are maintained.

5. Co-ordinates the resolution of application and software systems problems impacting production.
6. Assist systems and programming personnel as requested.
7. Log and document system changes, upgrades, and operations problems.
8. Responsible for performing appropriate administrative functions regarding new hires, transfers, and personnel leaving the Authority.
9. Develop and maintain procedural and work flow plans for computer operations and recommend changes to improve processing and utilization.
10. Fulfill departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation, or education.
11. Responsible for developing and maintaining service and maintenance agreements with various vendors.
12. Other responsibilities as assigned.

Job Contacts

The Systems Administrator must possess the ability to understand user descriptions of various problems. This individual must be able to establish and maintain effective working relationships with others.

Job Specifications

- Any combination of education and experience equivalent to graduation from an accredited college or university with major course work in Computer Science, Information Systems, or related field.
- Systems Administrator Windows Server (3 or more years of experience); Systems Administrator UNIX (3 or more years of experience)
- Must have considerable experience in application hardware and software analysis, installation, and trouble-shooting.
- Must have a thorough knowledge of data processing, hardware and software systems.
- A thorough knowledge of network administration is necessary.
- Must have some knowledge of Authority operations.
- Must have the ability to install and maintain hardware and software.
- The ability to analyze and diagnose complex problems regarding hardware, software and network issues.

SENIOR SYSTEMS ADMINISTRATOR (Windows Server, UNIX)

General Definition of Work

The Senior System Administrator works under the direction of the Data Center Manager providing design, implementation, management, control, and maintenance of the network. The Senior System Administrator provides input to management and guidance to the network staff.

Essential Position Functions

Sample Accountabilities

1. Designs, implements and manages the Authority network.
2. Provides input to management on design, procurement of network products, and the implementation process.
3. Provides guidance to network staff.
4. Leads network staff to properly implement desired solutions.
5. Monitors and tunes network for optimal performance.
6. Interfaces with vendors to resolve problems.
7. Identifies potential problems and provides solutions to the Data Center Manager.
8. Manages and oversees modem and communications processes.
9. Establishes a growth plan for the network.
10. Maintains a high level of technical expertise through technical education and utilizes expertise to develop and advise IT staff.
11. Other responsibilities as assigned.

Job Contacts

The Senior System Administrator must possess the skills to understand user descriptions of various problems. This individual must have the ability to establish and maintain effective working relationships with others, and to secure co-operation in difficult work situations. They must possess the skills to communicate effectively not only in writing, but also verbally.

Job Specifications

- Any combination of education and experience equivalent to graduation from an accredited college or university with major course work in Information Systems, Computer Science, or a related field
- Systems Administrator Windows Server (5 or more years of experience); Systems Administrator UNIX (5 or more years of experience)
- Considerable experience in network analysis, installation, tuning, and troubleshooting.
- Extensive knowledge of data processing, hardware and software systems.
- The ability to analyze and diagnose complex network issues.
- The ability to recommend and implement resolutions to network problems.

NETWORK ENGINEER

General Definition of Work

The Network Engineer is responsible for resolving network errors or failures, identifying network problems, and implementing corrective actions.

Essential Position Functions

Sample Accountabilities

1. Identify network impacts and benefits for supporting corporate strategies, upgrades, and migration projects.
2. Perform data collection and performance evaluation of network protocols and network hardware.
3. Maintain the IT lab environment for developers and research and development.
4. Ability to address problems with hubs, routers, switches, cabling, network communication devices, LAN and WAN connectivity, and dial-up and ISP connectivity.
5. Researches, evaluates, and recommends changes to the network architecture.

Job Contacts

The Network Engineer must possess the skills to understand user descriptions of various problems. This individual must have the ability to establish and maintain effective working relationships with others, and to secure co-operation in difficult work situations. They must possess the skills to communicate effectively not only in writing, but also verbally.

Job Specifications

- Three to five years of experience in the design and implementation of complex network environments
- Bachelor's degree or equivalent
- Considerable experience in network analysis, installation, tuning, and trouble-shooting
- Extensive knowledge of data processing, hardware and software systems
- The ability to analyze and diagnose complex network issues
- Requires a substantial amount of analysis and the integrating and coordinating of various elements in assigned problem area
- Requires the regular exercise of independent action within defined policy parameters in area of specialty

SENIOR NETWORK ENGINEER

General Definition of Work

The Senior Network Engineer is responsible for the design and implementation of network infrastructure projects. This person develops network architecture strategies and evaluates future networking technologies. He or she is responsible for resolving network errors or failures, identifying network problems, and implementing corrective actions.

Essential Position Functions

Sample Accountabilities

1. Identify network impacts and benefits for supporting corporate strategies, upgrades, and migration projects.
2. Perform data collection and performance evaluation of network protocols and network hardware.
3. Maintain the IT lab environment for developers and research and development.
4. Ability to address problems with hubs, routers, switches, cabling, network communication devices, LAN and WAN connectivity, and dial-up and ISP connectivity.
5. Researches, evaluates, and recommends changes to the network architecture.

Job Contacts

The Senior Network Engineer must possess the skills to understand user descriptions of various problems. This individual must have the ability to establish and maintain effective working relationships with others, and to secure co-operation in difficult work situations. They must possess the skills to communicate effectively not only in writing, but also verbally.

Job Specifications

10. Five to seven years of experience in the design and implementation of complex network environments
11. Bachelor's degree or equivalent
12. Considerable experience in network analysis, installation, tuning, and trouble-shooting
13. Extensive knowledge of data processing, hardware and software systems
14. The ability to analyze and diagnose complex network issues
15. Requires a substantial amount of analysis and the integrating and coordinating of various elements in assigned problem area
16. Requires the regular exercise of independent action within defined policy parameters in area of specialty

PC SUPPORT ANALYST

Position Purpose

The PC Support Analyst performs difficult technical work that is related to the application of personal computer hardware, software systems and Novell network administration.

Essential Position Functions

Sample Accountabilities

1. Installs personal computers and printer connections.
2. Provides hardware support for stand-alone and networked personal computers.
3. Troubleshoots and diagnoses problems regarding printers, network issues, PC hardware and software.
4. Recommends new software/hardware solutions for Authority-wide PC LANs, implements selected products.
5. Audits all PC hardware and software and maintains proper inventory controls.
6. Co-ordinates preventive maintenance schedules with vendors, and ensures proper maintenance controls.
7. Performs related tasks as required.

Job Contacts

The PC Support Analyst must have the ability to understand user descriptions of various problems. This individual must have the ability to establish and maintain effective working relationships with others.

Job Specifications

- Combination of education and experience equivalent to graduation from an accredited college or university with major course work in Computer Science, Information Systems, or related field.
- Two or more years of experience.
- Considerable experience in application hardware and software analysis, installation, and trouble-shooting.
- Thorough knowledge of Novell network administration.
- Thorough knowledge of data processing and PC hardware and software systems.
- Ability to install and maintain PC hardware and software.
- Ability to analyze and diagnose complex problems regarding PC hardware and software and network issues.

SENIOR PC SUPPORT ANALYST

General Definition of Work

The Senior PC Support Analyst works under the direction of the Desktop Services Manager providing overall co-ordination, implementation, maintenance, and control of personal computer hardware and software within the Authority to ensure compatibility and integration with the strategic direction. The Senior PC Support Analyst provides Novell network assistance, input to management, and guidance to the support staff.

Essential Position Functions

Sample Accountabilities

1. Identify and initiate resolutions to user problems and concerns associated with personal computer hardware and software to the user's satisfaction.
2. Plan and co-ordinate the installation and implementation of personal computer hardware and software according to department standards and procedures.
3. Analyze training needs of personal computer users and develop training programs to ensure maximum utilization of available automation tools.
4. Identify potential problems and provide solutions to the Desktop Services Manager.
5. Maintain a high level of technical expertise through technical education and utilize expertise to advise IT staff, to recommend new and improved guidelines, and to utilize state of the art technology when implementing automation solutions.
6. Maintain hardware and software inventory information to provide upgrades and maintenance as necessary.
7. Co-ordinate resource set-ups for new users and demonstration requirements.
8. Other responsibilities as assigned.

Job Contacts

The Senior PC Support Analyst must have the ability to understand user descriptions concerning various problems. This individual must be able to establish and maintain effective working relationships with others and to secure co-operation in difficult work situations. The ability to communicate effectively both verbally and in writing is required.

Job Specifications

- Any combination of education and experience equivalent to graduation from an accredited college or university with major course work in Information Systems, Computer Science, or a related field.
- Five or more years of experience.
- Considerable experience in personal computer hardware and software, network analysis, installation, tuning, and trouble-shooting.
- Extensive knowledge of data processing, personal computer hardware and software systems.
- Thorough knowledge of network administration
- Some knowledge of authority operations and procedures is required.
- The ability to analyze and diagnose complex system issues.
- The ability to recommend and implement resolutions to Information Technology problems.

PROJECT MANAGER

Position Purpose

The Project Manager (PM) is the person with the authority to manage the project and in general, the PM is responsible for the overall success of the project. This includes a number of standard “best practice” activities, which the PM must lead or perform on a project. This does not mean that the PM must do all of the work themselves, as there may be an entire team of people working on the plan; however, if something does not go right, the PM is held accountable.

Problems and Challenges

The Project Manager is challenged with maintaining the project management process with a level of reliability and execution of speed.

Essential Position Functions

Additionally, there are (3) key aspects for the PM to watch and perform within the typical areas of PM responsibility:

1. Communication and Cross-Functional Contributions
2. Progress and Risk Management
3. Ensuring Quality

Sample Accountabilities

1. Manages, monitors, and coordinates IT and business projects.
2. Reports on project progress with the project management tools.
3. Monitors project resource allocations.
4. Performs special projects upon request.
5. Provides consultation and assistance with project management.
6. Requires analysis, gathering of facts, and preliminary study of project information.

Authority

- Develop and execute project plans.
- Supervise assigned project staff.
- Supervise development of systems design and program code to specifications.
- Maintain production working relationships with end-users and other IT functions
- Create and maintain project documentation.

Job Contacts

Within the IT organization, routine contact is required with IT managers at all organizational levels. Within the business, periodic contact is required with project team members.

Job Specifications

- Bachelor's degree or equivalent
- Five or more years of experience
- Proficiency in project planning, organizing, team motivation and delegation.
- Data analysis.
- Excellent written, verbal and interpersonal communication skills.
- Excellent organizational skills and attention to detail.
- Excellent documentation skills.
- Team player with the ability to manage others through teamwork.
- Goal/results oriented, self-directed and needs little direction.
- Excellent time management skills.
- Ability to work with tight deadlines in an ever-changing environment.
- Fast learner with the ability to operate effectively in new environments and with new processes.
- Ability to collaborate as a strong team member in a fast-paced environment.
- Ability to integrate information from multiple sources in order to anticipate issues and come up with solutions to resolve the problem.
- Ability to influence individuals at all levels in different departments, including senior management.
- High degree of commitment, flexibility, self-motivation, self-confidence, assertiveness and high tolerance of ambiguity.

SENIOR PROJECT MANAGER

Position Purpose

The Senior Project Manager (SPM) is the person with the authority to manage the project and in general, the SPM is responsible for the overall success of the project. This includes a number of standard "best practice" activities, which the PM must lead or perform on a project. This does not mean that the PM must do all of the work themselves, as there may be an entire team of people working on the plan; however, if something does not go right, the PM is held accountable.

Problems and Challenges

The Senior Project Manager is challenged with maintaining the project management process with a level of reliability and execution of speed.

Essential Position Functions

Additionally, there are (3) key aspects for the SPM to watch and perform within the typical areas of PM responsibility:

1. Communication and Cross-Functional Contributions
2. Progress and Risk Management
3. Ensuring Quality

Sample Accountabilities

1. Manages, monitors, and coordinates IT and business projects.
2. Reports on project progress with the project management tools.
3. Monitors project resource allocations.
4. Performs special projects upon request.
5. Provides consultation and assistance with project management.
6. Requires analysis, gathering of facts, and preliminary study of project information.

Authority

- Develop and execute project plans.
- Supervise assigned project staff.
- Supervise development of systems design and program code to specifications.
- Maintain production working relationships with end-users and other IT functions
- Create and maintain project documentation.

Job Contacts

Within the IT organization, routine contact is required with IT managers at all organizational levels. Within the business, periodic contact is required with project team members.

Job Specifications

- Bachelor's degree or equivalent
- Ten or more years of experience
- Proficiency in project planning, organizing, team motivation and delegation.
- Data analysis.
- Excellent written, verbal and interpersonal communication skills.
- Excellent organizational skills and attention to detail.
- Excellent documentation skills.
- Team player with the ability to manage others through teamwork.
- Goal/results oriented, self-directed and needs little direction.
- Excellent time management skills.
- Ability to work with tight deadlines in an ever-changing environment.
- Fast learner with the ability to operate effectively in new environments and with new processes.
- Ability to collaborate as a strong team member in a fast-paced environment.
- Ability to integrate information from multiple sources in order to anticipate issues and come up with solutions to resolve the problem.
- Ability to influence individuals at all levels in different departments, including senior management.
- High degree of commitment, flexibility, self-motivation, self-confidence, assertiveness and high tolerance of ambiguity.

TECHNICAL WRITER

General Description of Work

The job involves preparing and maintaining systems, programming, data control, user, and operations documentation. Such documents include technical specifications and user guides for computer applications. The job also involves quality assurance testing of computer applications and modifications.

Typical Tasks

- Turning rough technical specifications for computer applications into properly-formatted, finished documents.
- Creating graphics for technical documents.
- Creating appropriate language for technical and special documents.
- Assembling text and graphics into a finished document.
- Creating end-user instruction manuals for computer applications.
- Preparing user manuals and providing user documentation training and support.
- Quality assurance testing of computer applications.
- Creating specification documents.
- Preparing graphics for specification documents.
- Creating user manuals.
- Preparing graphics for user manuals.
- Transcribing department policies and procedures.
- Proofreading technical documents.
- Creating and maintaining documentation directories.
- Providing documentation to programmer/analysts.
- Creating guidelines, policies, and procedures pertaining to documentation development and distribution.
- Distributing technical documents.
- Keeping documents and distribution up-to-date.
- Assists in establishing documentation standards.

Knowledge and Abilities

General knowledge of computer hardware and software. Thorough knowledge of technical documents related to computer system development. Thorough knowledge of document development. General knowledge of policy and procedure development. Personal computer skills. Thorough knowledge of word-processing and graphics packages for a personal computer. Good written and oral communications. Good organization abilities.

Education and Experience

Experience with development of technical documentation related to computer systems. Minimum of 3 years' experience as a technical writer in a computer system development environment. Experience in quality assurance testing of computer applications. Experience with the development of policies and procedures. Any combination of education and experience equivalent to the completion of a 2-year degree at an accredited college.

DATABASE ADMINISTRATOR

Position Purpose

The Database Administrator performs entry-level database management including development and interface activities. This person evaluates and designs systems and establishes and maintains the data dictionaries.

Problems and Challenges

The Database Administrator is challenged with managing and developing interface activities with complex systems with a high level of reliability and execution of speed.

Essential Position Functions

Sample Accountabilities

1. Design new data management systems, applications, programs, and procedures.
2. Installs, implements, and maintains data related software systems.
3. Documents database processes.
4. Collects and evaluates the performance of data processing systems.
5. Develops and administers policies and procedures relating to accumulation, storage, and deletion of data processing records.
6. Evaluates system capacity requirements.
7. Identifies user requirements, evaluates alternatives, and makes recommendations for hardware or software selection.

Job Contacts

Within the IT organization, routine contact is required with IT managers at all organizational levels. Within the business areas, periodic contact is required.

Job Specifications

- Bachelor's degree or equivalent
- Two or more years of experience required
- Requires substantial amount of analysis and interpretation of information
- Requires understanding of the policies, programs, and organizational relationships within the Authority

DATA ARCHITECT

Position Purpose

The Data Architect provides leadership and supporting roles in the planning, developing, and maintaining common enterprise architecture, data warehouses, and data marts. This person is responsible for gathering, analyzing, and modeling data requirements supporting information needs at all levels of the organization.

Problems and Challenges

The Data Architect is challenged with managing and developing the enterprise data architecture with complex systems with a high level of reliability and execution of speed.

Essential Position Functions

Sample Accountabilities

1. Develops and administers policies as they relate to the accumulation, storage, and deletion of data processing records.
2. Designs new data processing systems, applications, programs, and procedures. Installs and implements systems/programs and corresponding procedures.
3. Provides leadership for special departmental project teams, conducts meetings, and coordinates activities. Writes and distributes documents related to team status and progress. Drafts recommendations.
4. Guides, leads, reviews, advises, verifies, and observes the work of direct reports.
5. Controls and monitors projects and oversees administrative details.
6. Evaluates data processing systems capacity requirements.
7. Identifies user requirements, evaluates software alternatives, and makes recommendations for the selection of hardware and software.
8. Collects data and evaluates the performance of data processing systems. Fine tunes systems as required.

Job Contacts

Within the IT organization, routine contact is required with IT managers at all organizational levels. Within the business area, periodic contact is required.

Job Specifications

- Bachelor's degree or equivalent
- Three or more years of experience
- Requires a substantial amount of analysis and integration and coordination of information
- Requires the regular exercise of independent action within defined policy parameters
- Requires understanding of the policies, programs, and organizational relationships within the Authority

ETL DEVELOPER

Position Purpose

The ETL Developer provides data analysis, defines and maintains data standards, and installs, configures, and maintains ETL tools.

Problems and Challenges

The ETL Developer is challenged with managing and developing the enterprise data architecture with complex systems with a high level of reliability and execution of speed.

Essential Position Functions

Sample Accountabilities

1. Design, administer, and troubleshoot new and existing ETL jobs.
2. Evaluate, test, and recommend best practices and tools for ETL.
3. Perform data mapping and data modeling.
4. Define ETL rules.
5. Facilitate database and data cube design.
6. Support various business intelligence programs.
7. Design and administer to data marts, data cubes, and other essential BI elements.
8. Consult with users to determine most effective reporting requirements.
9. Design, implement, and deliver reports and data presentations.
10. Install, maintain, and upgrade various ETL and BI tools.

Job Contacts

Within the IT organization, routine contact is required with IT managers at all organizational levels. Within the business area, contact is required.

Job Specifications

- Bachelor's degree or equivalent
- Two or more years of experience
- Requires a substantial amount of analysis and integration and coordination of information
- Requires the regular exercise of independent action within defined policy parameters
- Requires understanding of the policies, programs, and organizational relationships within the Authority

SENIOR DATABASE ADMINISTRATOR

Position Purpose

The Senior Data Systems Administrator reviews and advises on existing systems dataflow, SQL/Sybase structure, and administration. This person reviews and advises on architecture for data warehouses and data marts.

Problems and Challenges

The Senior Data Systems Administrator is challenged with managing and developing the enterprise data architecture with complex systems with a high level of reliability and execution of speed.

Essential Position Functions

Sample Accountabilities

1. Reviews and proposes use of SQL Server features (base application) and tools.
2. Reviews and monitors performance and tuning.
3. Performs database backups and restores.
4. Installs and delivers database software.
5. Configures and manages databases.
6. Prepares technical database documentation.
7. Delegates and supervises DB administration tasks or SQL stored procedure maintenance.
8. Develops, proposes, executes, and monitors policies and procedures for database administration, database documentation, DTS and SQL stored procedures, Overall database security strategy, Database backup and replication, and performance and tuning criteria.

Job Contacts

Within the IT organization, routine contact is required with IT managers at all organizational levels. Within the business area, periodic contact is required.

Job Specifications

- Bachelor's degree or equivalent
- Six or more years of experience
- Requires a substantial amount of analysis and integration and coordination of information
- Requires the regular exercise of independent action within defined policy parameters

INFRASTRUCTURE ARCHITECT

Position Purpose

The Infrastructure Architect is responsible for designing and implementing changes to system platforms in the Data Center. This person will develop migration plans that will accomplish OS changes, upgrades and consolidations without impacting business operations.

Problems and Challenges

The Infrastructure Architect is challenged with coordinating migration plans for servers, network and desktops simultaneously.

Essential Position Functions

Sample Accountabilities

1. Implementation of technologies to support external business partners.
2. Work with System Administrator and Network Analyst staff on resolution of performance issues.
3. Implementation of purchased packages to support business units.
4. Determines training needs for the identified roles and responsibilities of the participants in the OS or desktop migration process.
5. Recommends to senior management improvements to system platforms, security, data communications, and integration of the Web with other technology initiatives.

Job Contacts

Within the IT organization, routine contact is required with system administrators, network analyst and IT managers at all organizational levels.

Job Specifications

- Bachelor's degree or equivalent
- Microsoft Certification Preferred (MCSE, MCSD etc.)
- Three or more years of experience
- Exercise of independent action within defined parameters for the area of specialty
- An understanding of MS Windows Server, MS Windows XP, Cisco, Enterasys, TCP/IP, Citrix, MS ADS