Nothing in this job description restricts management's right to assign or reassign duties and responsibilities to this job at any time.

DUTIES This is a non-career, term job with the Metropolitan Washington Airports Authority (Airports Authority). Serves as a Server Administrator in the Office of Technology (Office) responsible for ensuring the Airports Authority's technology systems run efficiently by maintaining software updates, designing and implementing new systems structures, monitoring server activity, and auditing server security. Provides comprehensive reporting and metrics for storage utilization/performance and conducts problem analysis and server continuous improvement. Performs related functions.

--Monitors and maintains Windows and Linux Server operating systems and additional server components. Designs, develops, tests, debugs, and implements complex operating system components, software tools, server hardware, system components and utilities required for the operation, maintenance and control of the Airports Authority's technology systems. Helps ensure the computer system server infrastructure is in good operating order and aligned with business requirements. Serves as second level technical problem escalation resource; trouble shoots and diagnoses problems and executes complex problem analysis procedures in response to trouble reports

--Reports and forecasts storage trends and needs. Monitors, maintains and implements data replication schemes for disaster recovery (DR) purposes. Performs system upgrades and patches to storage area network (SAN) infrastructure (e.g. redundant array of independent disks (RAID)). Maintains currency on industry trends and directions in the areas of SANs and data protection. Keeps the storage systems infrastructure in good operating order. Provides a means of data recovery in the event of a disaster, in accordance with business needs.

--Researches, identifies, tests, and certifies technology products required for server and storage solutions. Participates in selection of server and storage technologies and products. Directs or applies patches to major subsystems and services, roles, and file system components within Windows Systems environment. Performs Operating System and patch testing on all changes prior to installation.

--May perform routine administrative tasks such as entering/setting up, updating, and modifying user rights/privileges. Maintains proper operation and high availability of computer systems and software (e.g., five nines). Ensures permissions and access rights are in sync with changing business requirements. Writes and updates technical notes, instructions and procedures. Writes change control plans and procedures. Coordinates the maintenance of the collective policies, procedures and technical knowledge base of the department with the Program Support group. Communicates causes, symptoms and analyses of problems to Manager and others on team. Documents changes made to system(s).

--Creates backup and recovery strategies to ensure system recoverability. Works with Security Operations in the design of server and storage system security policies and ensures they are in compliance with government regulations and consumer privacy standards / best practices.

--Ensures that storage deliverables are understood, acknowledged, funded, coordinated with upstream and downstream teams, built and delivered on-time for all new initiatives and organic growth. Regularly reviews and reports storage capacity and growth with other Office departments, in particular with the ARP Team. Forecasts growth and calculates storage needs, reallocating space as appropriate. Regularly, reviews and reports storage performance metrics and tracks trends. May lead storage intensive projects for the larger Office infrastructure engineering team.

--Documents or assists Program Support personnel in the documentation of all aspects of assigned systems including system design and dependencies, change history, problem history, backup, restore and disaster recovery procedures and maintenance policies. Creates support documents for deploying storage solutions with recommended architectures.

--Responsible for defining standard engineering designs, templates, processes, and procedures for implementing projects that follow existing Airports Authority architectures. Analyzes system performance, modifying parameters to improve throughput and effectively utilize system resources. Monitors resource usage, making adjustments, as required.

--Mentors or assists in the training of lower graded staff. May be assigned a lower graded staff member for assistance on a large/complex system configuration or change.

--Communicates and interacts effectively with internal and external business contacts including, but not limited, to other members of the unit/team, other Airports Authority employees (such as managers, supervisors, professionals, and support staff), and vendors or suppliers.

--Uses a computer, tablet, or smart phone for various applications (email and communications, word processing, data entry, compiling information for reports, spreadsheets, graphics, flow charting, planning, scheduling, presentations, etc.), as well as specialized software/systems used in performance of DUTIES.

--Operates a sedan or similar vehicle on and off airport complexes, to travel to meetings, various data centers, etc., landside and, if required, airside.

Performs other duties as assigned.

Critical features of this job are described under the headings below. They may be subject to change through reasonable accommodation or otherwise.

MINIMUM QUALIFICATIONS (MQs)

To be rated qualified for this job, an applicant must meet all of the MQs listed below at the time of vacancy announcement closure.

1. A Bachelor's Degree in Computer Science, Telecommunications, Management Information Systems (MIS) or a related field providing a strong foundation for success in the DUTIES in this job description, or an equivalent combination of education, experience and training that totals four years.

2. Eight years of <u>progressively responsible</u> experience in server administration (including supporting and managing servers in a production environment) that includes substantive work in most of the DUTIES in this job description, to include: (a) identifying and analyzing server requirements; planning the design and deployment of new technologies in upgrades and/or consolidations; (b) performing server administration in Linux environments, including Linux kernel configuration, performance monitoring and tuning, multiple Linux distributions, installation, configuration management and patch administration; (c) server administration in Microsoft (MS) Windows environments, including MS Exchange 2007/2010, MS Windows Server 2003/2008/2012 and MS Active Directory design, implementation and support; (d) administration in large-scale Oracle database installations, including e-Business Suite database applications and ERP suite; (e) VMware Infrastructure 5.x/6.x and vSphere administration; (f) providing server administration in a Dell/EMC SAN environment, including design, implementation and support of EMC VNX/Clarion/ Symmetrix arrays and Brocade/McData switches; and (g) working in Symantec Enterprise Vault or equivalent configurations.

A fully equivalent combination of education and training beyond what is needed to satisfy MQ 1 above may be substituted for up to two years of these eight years of experience (MQ2). For example, a master's degree in any field providing a strong foundation for performance of the DUTIES in this job description may be substituted for two years of experience

3. Education, experience or training demonstrating the ability to lead projects or work groups (such as the ability to assign/review immediate tasks to the group led, set the pace and check work in progress or upon completion, all consistent with the group's goals and other guides) and to work on/with a team as a contributor.

PREFERRED QUALIFICATIONS

The qualifications listed below (if any) are preferred and <u>may be</u> considered in the selection process, but are <u>not</u> required to be rate qualified for this job.

1. Storage Networking Cisco Certified Internetwork Expert (CCIE) certification or Data Center Cisco Certified Internetwork Expert (CCIE) certification.

2. SNIA Certified Storage Architect (SCSA) from The Storage Networking Industry Association.

3. Certified as a Microsoft Certified Solutions Associate (MCSA) 2012 or Microsoft Certified Solutions Expert (MCSE) 2008/2012.

4. Certified with at least one certification from EMC, Hitachi, Linux Red Hat, or Microsoft Windows Server.

5. Certification training in one or more of the technologies supported such as, Symantec Netbackup, Symantec Enterprise Vault, Dell Storage certification

KNOWLEDGE, SKILLS, ABILITIES, AND OTHER FACTORS (KSAOs)

The following KSAOs are required for successful performance of this job and are a basis for rating and ranking applicants who are found to meet the MQs. *Local, Federal, airport industry or Airports Authority-specific bodies of knowledge listed below may be acquired on the job, typically; ability to rapidly acquire them is required at the time of vacancy announcement closure.*

1. Knowledge of supporting Windows Server operating system and ability to maintain additional server components including but not limited to Exchange, Active Directory, SharePoint, SQL Server, SharePoint, Lync Server.

2. Knowledge of large scale design and implementation of Active Directory. Assessments and design of deployments of Windows 2008 / 2012 Active Directory and Exchange 2010/2013.

3. Knowledge of Active Directory and Exchange 2010 and a thorough understanding of issues related to implementing Active Directory and Exchange on large, distributed networks

4. Knowledge of Linux systems architecture including O/S and disk partitioning standards, backups, SAN, NAS, and multi-tier client-server

5. Ability to configure industry standard server hardware, storage arrays, backup systems. Familiarity with Storage Area Networks (SAN), Network Attached Storage (NAS), and fiber-channel switching concepts and configuration

6. Skill in problem solving to select, organize and logically process relevant information (verbal, numerical or abstract) to solve a problem. This includes the ability to recognize subtle aspects of problems and identify relevant information. Examples include skill in identifying server needs of end-users and configuring servers to meet their needs consistent with system standards; in making calculations and applying a variety of mathematical formulae to problems involving computer hardware; in reviewing system software upgrades for potential impact on existing and future Airports Authority servers; and in performing related work of a technical or an administrative type.

7. Knowledge of de-duplication technology and ability to establish a backup to disk solution using Symantec Netbackup.

8. Knowledge of email archiving with Symantec Enterprise Vault.

9. Knowledge of Microsoft clustering and other high available solutions for data protection and familiarity with Content Addresses Storage (CAS) solutions

10. Knowledge of data backup process using Symantec NetBackup. Ability to create new backup, restore, vaulting, duplication, catalog and other Netbackup jobs.

11. Knowledge and functional understanding of Email Security to configure Enterprise Email Security appliances.

12. Skill in oral communication to understand verbal information (including instructions, descriptions, and ideas) and express and exchange routine and non-routine information that is clear, complete, and concise so that others will understand. This includes the skill in

encouraging effective oral communication by others in exchanging information with the Airports Authority's department heads and end users regarding pertinent network activities, recommendations, and plans.

13. Skill in written communication to understand written information (facts and sometimes conflicting assertions and arguments), draw inferences, form hypotheses, develop logical arguments, and to express such information in writing so that others will understand, and in certain circumstances, be convinced and/or persuaded. This includes skill in ability to understand written technical information such as system flow charts, traffic flow, and data processing concepts; document and prepare technical reports (e.g., feasibility studies for various project changes, documentation of network records, operational procedures and manuals, network resource administration policies and procedures); prepare short- and long-term strategic plans; and, in general business communication, make recommendations and prepare letters, memoranda, and other documents.

14. Skill in using a computer and modern office productivity software for communicating, planning, scheduling, preparing spreadsheets and analyzing data, word processing, presentations, etc., and in using specialized equipment and software to perform the core IT work of the job.

15. Interpersonal skills to interact effectively with business contacts in a businesslike, customer service-oriented manner. This includes skill in taking ownership of high risk or critical situations; managing customer expectations; negotiating solutions to complex scenarios with multiple parties and agendas; influencing customer perception and acceptance of change and innovation; and engaging customer, partner, and executive resources in the most appropriate system solution.

RESPONSIBILITY Is responsible for the development of the service catalog, for managing service delivery, for continuous improvement, for providing high-quality day-to-day server services, and for the design, configuration, installation and upgrade of hardware, systems software, applications software and other components to improve service delivery with careful control of costs. Work effects the effectiveness of the Airports Authority's server administration which in turn effects business operations, Airport Authority-wide.

Reports to the Manger, Server Administration Group (Supervisor). As a subject matter expert, most work flows to the incumbent as a result of assigned functions and established work processes. Other work typically results from changes in the network or server configurations, which require proactive or reactive responses to identify issues, solve problems, make recommendations, take action, etc. The Supervisor provides broad objectives and policy guidance for recurring assignments and, in consultation with the incumbent, brief instructions and time frames for special projects. Most work is accomplished independently. The incumbent collaborates with, and keeps the Supervisor informed and typically elevates only highly complex or highly sensitive issues for assistance in resolution; as a subject matter expert, initiative is expected. Typically, work is reviewed in terms of quantity, quality, timeliness, customer service, teamwork, adherence to guidelines, and other factors, including specific performance management requirements.

Guidelines include but are not limited to Oracle IT enterprise architecture, Linux/UNIX and Windows operating systems architecture; generally-accepted standards on IT information security; Airports Authority business processes revolving around the ERP solution, which is Oracle-based; and Airports Authority programs, guidelines, policies and procedures on contracting, personnel administration and other administrative areas. The incumbent uses: (1) judgment in applying guidelines, along with experience, to determine when a project phase or an administrator's work is in compliance with contractual requirements, IT standards (ranging from the coming Oracle IT enterprise architecture to the current Linux/Unix and Windows architectures) and consistent with Airports Authority business processes and end-end-user wants/needs or whether nonperformance or inadequate performance exists and intervention or corrective action is needed, and (2) initiative in recommending actions to prevent, minimize or correct deficiencies in daily server administration.

EFFORT The work is primarily sedentary and typically requires light physical effort as in opening/closing file drawers, lifting and carrying files, etc. Incumbent may sit for extended periods while performing desk work; moves about to visit end-users and server facilities, etc. Constantly uses a computer to access data bases, develop reports, analyze information and perform other tasks; operates other office equipment. Reviews computer printouts that contain small print. Frequently exchanges information by telephone. In driving, operates vehicle using judgment in consideration of weather, traffic and other factors.

WORKING CONDITIONS Works primarily in an adequately lighted, ventilated and temperature controlled office and conference rooms. Occasionally traverses or works in areas that may require access by climbing or crawling, and sometimes works in cramped or awkward position to manually adjust wires, controls, and other items of equipment. Is subject to some job pressures from server problems and to some job frustrations from demands for service that exceed available resources. Is subject to potential interpersonal conflict situations from end-users during unscheduled server downtime, tight resources, etc.

OTHER SIGNIFICANT JOB ASPECTS Must be able to work varied schedule of days and outside normal 8am-5pm business hours for scheduled and emergency maintenance and/or upgrades as well as standard on-call rotation. Is subject to hold-over and recall for IT emergencies and may need to work nights and weekends depending on operational requirements and other factors.