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| **GENERAL DESCRIPTION OF WORK** | | |
| Positions in this class provide support for a number services which may include distributed platforms, mainframe, and network. Those services include monitoring distributed platforms, mainframe, storage and networks for alerts and failures and responding to those situations immediately. In this capacity they troubleshoot the issues, make repairs and support vendors in diagnosing and rectifying problems. They also rack servers, switches, and routers and may support the deployment of storage equipment and mainframe hardware. They also provide network, cabling for all of these types of equipment which include both copper and fiber cabling. In the case of servers they are also  responsible for deploying Operating Systems (OS) images to the servers which may be Windows, VMware, Red Hat, Solaris, and AIX. They are also responsible for deploying management software to servers and configuring the servers based on customer requirements which are specified. They assist management in insuring all aspects of issues and deployments are properly and sufficiently documented (CMDB, Remedy tickets, etc,). They also manage, support and monitor data floor security as well as provide ancillary monitoring and support for the building monitoring system, and building security systems | | |
| **CONTRIBUTING** | | |
| **Functional Competency** | **Examples of Work** | **Competencies** |
| **Technical Knowledge** | Define resources using default levels in mainframe tools and environment. JCL - Can modify code.  REXX - modify programs to handle additional needs or changing situations. MVS – provides assurance of simple allocations of disk.  RACF: Maintains groups using of routine profile security definitions, adding users to existing groups, resetting passwords.  Performs basic operation commands, using Operating Systems such as MS Windows or  Linux Red Hat  . | Knowledge of job specific operating systems and deployment methods.  Understands cabling schema and their limitations. Processes basic troubleshooting skills and is capable of communicating problem/issue details. Understands basic network structures and components. Has a working knowledge of all hardware/devices active in responsible environment. May require assistance with some technical assignments and /or problem resolution.  Knowledge of all security procedures and processes necessary in performing tasks. |
| **Technical Solution Development** | Responds quickly to all alerts and failures and may make the necessary changes and/or repairs.  Adds/deletes transactions to an existing OPUS profile.  Creates a new RACF ID when requested by security administrators. Sets up JCL for single step jobs.  Determines underlying problem when client cannot access computing resources. Analyzes JCL to determine why printouts are not working.  Creates templates required for documentation  Creates template or scripts to maximize response time to incidents Creates scripts to enhance business recovery exercise deployment Creates scripts to consolidate reports for operations daily reports. Develops operation procedures for effective and efficient operation. | Ability to assess available technologies and/or tools in order to recommend solutions for work functions within approved solutions guidelines. |
| **Technical Support** | Monitors all systems within their designated areas of responsibility. Racks all rack mount equipment and aids in the deployment of other types of equipment. Installs and/or upgrades systems and their peripherals as specified in the build documents. | Ability to identify and resolve routine issues reported by monitoring tools and/or service desk. |

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|  | Provides necessary cabling to support the various type of equipment deployed in their environment and generally power-up the equipment.  Explains usage of RACF process to SSA’s.  Provides technical expertise to help desk personnel and contacts client to document printing problems.  Works with ITS support and database analyst to determine why programmers cannot access a database table but can access the views.  Responds to incidents, service request, and change management.  Performs work instructions from Platform and Network Services as required. Analyzes hardware issues as directed by vendors using Vendor specific tool sets. Removes and Replaces Hardware i.e. (Hard Drives, Power Supplies, memory etc..) Provides Tier I and/or Tier II support escalation and notification as trained. Performs Voice platform support. | Ability to use basic tool sets to evaluate issues, document and escalate as needed.  Understands when and the protocol for seeking advanced level support to assist with problem resolution. |
| **Planning and Organizing** | Decommissions servers, wipe drives using kill disk or other tools. Monitors CICS and batch to identify abnormal situations.  Creates RACF user accounts as requested and attach to appropriate security groups and  profiles.  Creates CICS objects to fill client requests.  Performs shift transition and documenting next steps and scheduling follow ups. Coordinates on-site vendor visits and internal organization notification.  Analyzes distributive systems and backup jobs and documents success and failures and notifies appropriate team for resolutions | Ability to understand tasks required in job and takes ownership to complete tasks  Ability to take initiative to plan and organize daily activities and tasks.  Ability to work with little or no assistance to complete tasks. Ability to stay on task. |
| **Project Management** | Seeks more guidance to complete projects for parts of the project that are less complex than those handled at the journey level.  Attends provisioning meetings for server deployment, and follows the established process and procedures. | Ability to serve as a productive team member on a team project, assignment or to manage a project task.  Ability to contribute substantively to project meetings.  Ability to follow agency processes and approvals for projects. |
| **Consultation Skills** | One-on-one consulting with security administrators.  One-on-one interactive training w/ non-technical employees  One-on –one with platform services teams including Windows, Linux, Unix, Storage and Network services | Ability to understand issue(s) through discussion with customer (internal/external) or team members.  Ability to convey technical information to all parties involved in issues and to promote an understanding of relevant issues. |
| **JOURNEY** | | |
| **Functional Competency** | **Examples of Work** | **Competencies** |
| **Technical Knowledge** | Provides technical guidance in the monitoring of all systems and provides experienced leadership in diagnosing problems and determining solutions.  Defines and monitors the online environment’s routine tasks. JCL - writes code from scratch.  REXX - Writes simple, straight forward single flow, standalone REXX. | In depth knowledge of job specific operating systems and the deployment options available. Understands troubleshooting tools available and the ability to use them in performing in depth troubleshooting methods. Maintains understanding and knowledge of hardware/devices active in responsible |

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|  | MVS - can take action to troubleshoot batch jobs in the online environment.  RACF: defines new security resources such as dataset rules. Audits the security access. Identify and purge unused resources.  Performs admin commands in supported operating systems.  Adds servers to existing domains.  Able to explain the purpose of DHCP, DNS, and other configuration attributes. Troubleshoots Switches, Routers, TCP/IP, and IPv4 Addressing. | environment. Capable of resolving issues without assistance. Understand and possesses knowledge of problem escalation but may need assistance in escalating process.  Knowledge of all security procedures and processes necessary in performing tasks. |
| **Technical Solution Development** | Supports vendor technical personnel in resolving hardware and/or firmware issues. Checks ABENDS and analyzes errors. Resolves operation system problems. Creates new variables for batch job submitter.  Analyzes problem to develop work around for users until problem can be resolved. Use REXX and Access to develop tracking system for source program check out. Set up JCL for multi-step job streams and advanced condition code checking. Assisting with room and rack layout.  Responsible for the start-to-finish racking & stacking of the hardware deployed in the  environment. This spans from physical installation, to connection of KVM equipment, to turning on power to the ports, connecting the network drops and turnover of installation to Systems.  Creates templates for other analyst to use for documentation.  Acts as technical reviewer for lower level technicians and/or analysts Documents templates for enhancements and signoff.  Creates scripts for operations, and reviews lower level analyst scripts.  Develops and reviews operation procedures for effective and efficient operation. | Ability to assist in developing standards and/or procedures to provide for operational efficiency and to prevent problems.  Document and submit recommendations to existing standards and procedures to either enhance or correct methods to improve quality and efficiency. |
| **Technical Support** | Deploys OS, management software and configures the systems and/or equipment as requested in the build documents and provides quality assurance (QA) checks on cabling, documentation, and functionality of all newly deployed systems. Determines why a batch JCL abends with files not available.  Work with developers to determine why storage violations are occurring.  Assists in configuring, managing, supporting the Data Center specific power & cooling monitoring applications that are used across all Operations shifts.  Configures set points, controlling units, identifying issues and working with supervision and/or the vendor if/as necessary for resolution.  Responds to incidents, service request, and change management, and recognizes  correlations between multiple issues, and set priorities. Change Coordinator for changes required to perform.  Performs work instructions from Platform and Network Services as required and make recommendations to enhance them.  Provides Tier II support, escalation, and notification as required.  Provides work instructions for higher level analysts to sign off on and trains lower level analyst. | Ability to resolve both routine and some non-routine problems.  Ability to understand and relate underlying issues relevant to current problem, document, and take necessary action to correct current issues and to document and recommend solutions to prevent future occurrences. |

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| **Planning and Organizing** | Checks daily for mainframe status for abnormal operations; identify trends.  Coordinate staff SOP for source code. Monitor system or processing source checkout or consulting with programmers on JCL.  Conducts audits of RACF security messages to identify unauthorized access  Responsible for organizing and maintaining the procedures and documentation books for Operations.  Responsible for physical removal of hardware, drive sanitization and drive destruction for servers to be decommissioned.  Performs shift transition and documents next steps and schedues follow ups, with setting priorities for other analysts.  Act as team lead/point of contact for the control room.  Acts as on-site vendor coordinator and organizes completed internal organization notification and follow thrus.  Serves as the Subject matter expert (SME) analyzing distributive systems and Backup jobs and documenting success and failures notify appropriate team for resolutions | Ability to set priorities and know when priorities need to be changed.  Ability to work independently and manage job with little supervision. Ability to adapt work to unanticipated changes.  Ability to assist management on a regular basis in establishing work standards, standard processes and references. |
| **Project Management** | Single system implementations of limited scope.  Handles issues independently. Little coordination with others. Typically short lived projects. Up to three days for planning the tasks that need to happen.  Responsible for assisting asset management and inventory tracking.  Attends provisioning meeting for server deployment, and identifies technical requirements for system implementation, makes recommendations for server builds, power requirements, and facilities requirements as needed.  Attends ICAB and makes recommendations of service impacts during scheduled changes and service request. | Ability to manage one module of a larger project.  Ability to develop project plan, manage milestones and drives project forward for projects of limited complexity.  Ability to be accountable for keeping project of small size on track and on time. |
| **Consultation Skills** | Group training: develops lesson plans & teaches security administrators on specialized technical areas such as setting up ZEKE.  One-on-one consultancy with programmers.  Consult with application development specialists to define new apps profile groups. One-on –one with platform services teams including Windows, Linux, Unix, Storage and Network services.  Participate in Train the Trainer program to train other analyst on work instructions provided by platform services.  Also, conducts “Lunch n Learns” to share knowledge with operation. | Ability to understand, scheduled or recommends changes and the impact to the network environment.  Ability to build on-going partnerships with customers  (internal/external), support teams and vendors. |
| **ADVANCED** | | |
| **Functional Competency** | **Examples of Work** | **Competencies** |
| **Technical Knowledge** | Provides advanced levels of guidance to resolving issues encountered in the monitoring aspects of the position and provide suggested solutions to management.  High customization and prioritization of online environment’s available options | Maintains a thorough knowledge of job specific operating systems and a working knowledge of other operating systems. May possess some certifications. Thoroughly understands problems impacts and escalation process and protocol. |

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|  | JCL - Utilize advanced application features such as condition codes and procedures. REXX - Multiple modules and called-in common routines.  MVS detailed analysis to determine a program incompatibilities or improving efficient use of capacity.  Defined strategy / establish policy for the statewide security process.  Serves as operations subject matter expert (SME) in more than one Operating System, not only performs admin commands, but teaches others.  Teaches others in AD, DHCP, DNS subjects.  Performs TCP/IP addressing, Configures switches and routers and troubleshoots network issues.  Troubleshoots issues with storage devices, disk, tape SAN, NAS and backups. | Capable of resolving issues as well as escalating issues without assistance.  Knowledge of all security procedures and processes necessary in performing tasks. |
| **Technical Solution Development** | Develops a solution using profiles and comment types to create an environment where the users can create custom menus of applications.  Work with Network Services, Application Development, and vendors to ensure print capability when TCP/IP replaces SNA communications.  Write JCL procedures to allow generation of custom JCL for use by all sections. Reviews and approves perations processes and procedures.  Reviews and approves work instructions for operations  Serves as the SME for Operations for scripting and automation of procedures. | Ability to assess impact of updates and/or changes to existing system configurations.  Ability to recognize trends in reoccurring issues and analyze underlying cause and identify resolution.  Substantial knowledge of other work specialties and integrates this knowledge to achieve solutions to problems of high complexity.  Ability to interact with vendors as needed to resolve problems. |
| **Technical Support** | Produces and/or reviews documentation for all operational procedures, troubleshooting, and resolution documentation.  Troubleshoot sporadic problems with terminal lockups. Develops hypothesis, eliminate possible causes until problem is resolved.  Works with other professionals to select new monitoring tools for the MVS environment utilizing knowledge of the operating systems and needs of the agencies/department.  Responds to incidents, service request, and change management, and recognizes correlations between multiple issues, and sets priorities.  Change Coordinator for changes that require multiple tasks for large projects which require the coordination of multiple groups to perform to accomplish a goal.  Develop work instructions with Platform and Network Services as required for system, hardware upgrades thru out infrastructure.  Provides Tier III support, escalation, and notification as required, and working with  Vendors for best practices solution.  Create documentation for server builds, including check list and suggested configurations. | Ability to understand the priority and urgency of an issue and escalate with managers and/or vendors as necessary following prescribed protocol.  Ability to serve as a key resource in solving problems of medium to high complexity.  Ability to research, develop and document solutions to known or ongoing issues and promote these solutions through channels to achieve approved fix resolution. |

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|  | | Perform Quality Assurance for server builds.  Perform Trend Analysis on systems and hardware for efficiencies  Lead Operations for a platform in Business Recovery Exercise.  Write procedures that automate the process during Business Recovery Exercise. |  |  |
| **Planning and Organizing** | | Coordinates staff & provides system-wide guidance to other analysts on big picture problem resolution for advanced problems.  Monitors activities of mainframe support group: CICS environment; production batch schedules; RACF.  Design and implementation of mainframe security strategies.  Set goals and objectives for the control center staff to develop technical expertise. Participate in evaluation of and the selection of operational tools.  Act as team lead/point of contact for the Control Room.  Create reports to improve effectiveness and efficiencies of Operation Services. | Ability to provide regular day-to-day planning and organize the work of others.  Ability to reorganize work assignments of other technicians and/or analyst and adapts their workload to unanticipated changes if necessary. |
| **Project Management** | | Implements global change to the production environment for issues that cross multiple sub systems and batch operations.  Implementing large scale project, acting as project manager. Facilitate meetings with different groups and create effective results  . | Ability to manage projects of moderate size and scope. Ability to manage timelines and resources, in order to lead  project to successful completion. |
| **Consultation Skills** | | Provides technical updates to systems programmers/application developers. Develop consistent statewide security SOP.  Consult upwards to provide isolated IT knowledge to senior IT manager.  Write Technical “White Papers” which are interesting to operational staff, which provides insight into new technology or innovative thinking that inspires and grows the group to a new level.  Provide Power Point presentations for the staff and upper management. Participate in State or Federal Audits with proficiency | Ability to provide consultation on requests or issues assigned through Remedy or as requested from internal customers and team members.  Ability to understand the impact of issues to particular agency/agencies and address these impacts with the appropriate managers. |
| **MINIMUM EDUCATION AND EXPERIENCE REQUIREMENTS** | | | |
| •  •  •  • | Bachelor’s degree in computer science, Computer Information Systems, computer science engineering or a closely related degree from an appropriately accredited institution; or a | | |
| Bachelor’s degree from an appropriately accredited institution and one year of experience in operations/systems work or closely related area; or an  Associate’s degree in Computer Information Technology, Computer Engineering Technology or Networking Technology from an appropriately accredited institution and two years of experience in operations/systems work or closely related area; or an equivalent combination of education and experience.  Journey level requires an additional one year of education or experience. Advanced level requires an additional two years of education or experience | | |  |

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**SPECIAL NOTE**

This is a generalized representation of positions in this class and is not intended to identify essential work functions per ADA. Examples of competencies are primarily those of the majority of positions in this class, but may not be applicable to all positions. Ability to create and maintain collegial working relationships with customers and co-workers, contribute to a positive and inclusive work environment, and serve as a productive team member is expected in all positions.