Applications Development		
Title	**Description**	**Requirements**
Director, Systems and Programming	Responsible for the full software development life cycle management of projects/programs, and the direction of technical and business resources. Actively participates in long-range strategy planning and manages policy development to address complex business issues, provides leadership to cross-functional teams. Serves as the primary point of contact from project/program inception to delivery. Defines and develops project management infrastructure, manages a methodology driven quality plan, monitors and controls the quality of the deliverable, as well as manages the project completion process through customer acceptance. Works with business unit managers and forms alliances on projects, operational decisions, scheduling requirements/conflicts and vendor management contract clarification.	**Education:** Bachelor's or Master's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 10 to 15 years of IT and business/industry work experience, with at least 3 years of experience in a leadership role. **Breadth:** Overall responsibility for department decisions and management. Coaches and mentors more junior management staff.
Manager, Applications Development	Coordinates activities through direct and indirect staff. Directs technical teams in the areas of scheduling, technical direction, future planning and standard development practices. Participates in budgeting and capital equipment processes and quality improvement activities for the organization. Meets scheduled milestones to ensure project/program objectives are met in a timely manner and has an in-depth knowledge of the principles, theories, practices and techniques for managing the	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of IT work experience. Requires prior management, supervisory, or team leader experience. **Breadth:** Works under general

Applications Development		
Title	**Description**	**Requirements**
	activities related to planning, managing and implementing software projects and programs.	direction and mentors staff and/or more junior management staff.
Applications Architect	Provides design recommendations based on long-term IT organization strategy. Develops enterprise level application and custom integration solutions including major enhancements and interfaces, functions and features. Uses a variety of platforms to provide automated systems applications to customers. Provides expertise regarding the integration of applications across the business. Determines specifications, then plans, designs, and develops the most complex and business critical software solutions, utilizing appropriate software engineering processes - either individually or in concert with project team. Will assist in the most difficult support problems. Develops programming and development standards and procedures as well as programming architectures for code reuse. Has in-depth knowledge of state-of-the art programming languages and object-oriented approaches in designing, coding, testing and debugging programs. Understands and consistently applies the	**Education:** Bachelor's or Master's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of IT and business/industry work experience. **Complexity:** Technical expert in IT organization. Works on highly complex projects that require in-depth knowledge across multiple technical areas and business segments. Provides an enterprise-wide perspective and input into IT decisions. Translates highly complex concepts for peers and customers. Coaches and mentors more junior technical staff.

Applications Development		
Title	**Description**	**Requirements**
	attributes and processes of current application development methodologies. Researches and maintains knowledge in emerging technologies and possible application to the business. Viewed both internally and externally as a technical expert and critical technical resource across multiple disciplines. Acts as an internal consultant, advocate, mentor and change agent.	
Systems Analyst	Responsible for the design and development of IT systems. Develops design and functional specifications, produces deliverables related to the project(s) assigned and assists in post implementation support and system enhancements. Responsible for selecting appropriate C.A.S.E. tools to develop systems and software. Responsible for gathering, compiling and synthesizing information with regard to technology processes or systems. Possesses experience in minicomputer or client/server environments including the implementation and support of resource planning, sales automation, marketing, financial and distribution systems.	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.
Applications Development Analyst	Works closely with customers, business analysts, and team members to understand business requirements that drive the analysis and design of quality technical solutions. These solutions must be aligned	**Education:** Bachelor's Degree in Computer Science, Information Systems or other related field. Or equivalent work experience.

Applications Development		
Title	**Description**	**Requirements**
	with business and IT strategies and comply with the organization's architectural standards. Involved in the full systems life cycle and is responsible for designing, coding, testing, implementing and supporting applications software that is delivered on time and within budget. Makes recommendations towards the development of new code or reuse of existing code. Responsibilities may also include participation in component and data architecture design, performance monitoring, product evaluation and buy vs. build recommendations. Has experience in systems design and a solid understanding of development, quality assurance and integration methodologies.	**Experience:** Typically has 2 to 5 years of IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.
Enterprise Application Integration (EA) Engineer	Responsible for developing and deploying integrated solutions aimed at modernizing, consolidating and coordinating the independently designed applications within and across the enterprises. Determines how existing applications, legacy systems, databases, Web interfaces and/or hardware logic, which may be currently operating on multiple platforms, work together to meet the new and emerging enterprise requirements. Develops methods to efficiently reuse existing components. Works with users to gather business requirements, performs database analysis, codes and tests middleware routines to	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 5 to 7 years of IT work experience. **Complexity:** Advanced professional level role. Works on projects that may span a broad range of systems and enterprise-wide complex components. Provides subject matter expertise and technical direction to more junior technical staff.

Applications Development		
Title	**Description**	**Requirements**
	ensure successful and seamless communication among the various IT systems and applications components. . Possesses skills and knowledge of Enterprise Application Integration (EAI) methodologies and processes.	

Data Strategy and Management		
Title	**Description**	**Requirements**
Database Manager	Responsible for ensuring the design, maintenance and implementation of database management systems, which provides the organization with orderly methods of data storage and controlled access to data. Possesses the technical expertise to provide leadership and manage the design and development of the organization's database environment. Ensures the design and installation of database management system applications and the establishment of the appropriate linkages to existing database applications and to other data processing systems. Ensures the development of a backup and recovery scheme for the database environment and the development and implementation of disaster recovery and business continuance procedures.	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of IT work experience. Requires prior management, supervisory or team leader experience. **Breadth:** Works under general direction. Manages and mentors staff and/or more junior management staff.
Data Security Specialist	Responsible for the planning, design, enforcement and audit of security policies and procedures which safeguard the integrity of and access to enterprise systems, files and data elements. Responsible for acting on security violations. Maintains knowledge of changing technologies, and provides recommendations for adaptation of new technologies or policies. Recognizes and identifies potential areas where existing data security policies and procedures require change, or where new ones need to be developed, especially regarding future	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 4 to 6 years of IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.

Data Strategy and Management		
Title	**Description**	**Requirements**
	business expansion. Provides management with risk assessments and security briefings to advise them of critical issues that may affect customer, or corporate security objectives. Evaluates and recommends security products, services and/or procedures to enhance productivity and effectiveness. Oversees security awareness programs and provides education on security policies and practices.	
Database Analyst	Responsible for designing, modeling, developing and supporting Database Management Systems (DBMS). Analyzes data requirements, application and processing architectures, data dictionaries, and database schema(s), and then designs, develops, amends, optimizes, and certifies database schema design to meet system(s) requirements. Gathers, analyzes, and normalizes relevant information related to, and from business processes, functions, and operations to evaluate data credibility and determine relevance and meaning. Develops database and warehousing designs across multiple platforms and computing environments. Develops an overall data architecture that supports the information needs of the business in a flexible but secure environment.	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.
Data Architect	Responsible for enterprise-wide data design, balancing optimization of data access with batch loading and resource	**Education:** Bachelor's or Master's Degree in Computer Science, Information Systems, or other related field. Or

Data Strategy and Management		
Title	**Description**	**Requirements**
	utilization factors. Knowledgeable in most aspects of designing and constructing data architectures, operational data stores, and data marts. Focuses on enterprise-wide data modeling and database design. Defines data architecture standards, policies and procedures for the organization, structure, attributes and nomenclature of data elements, and applies accepted data content standards to technology projects. Responsible for business analysis, data acquisition and access analysis and design, Database Management Systems optimization, recovery strategy and load strategy design and implementation.	equivalent work experience. **Experience:** Typically has 7 to 10 years of IT and business/industry work experience. **Complexity:** Technical expert in IT organization. Coaches and mentors more junior technical staff. Provides input into highly complex and high impacting decision as it relates to area of expertise.
Data Modeler	Accountable for analyzing and developing complex logical database designs, logical data models and relational data definitions in support of corporate and customer information systems requirements. Understands the methodologies and technologies that depict the flow of data within and between technology systems and business functions/operations. Responsible for the identification and resolution of information flow, content issues and the transformation of business requirements into logical data models. This position identifies opportunities to reduce data redundancy, trends in data uses, and	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 4 to 6 years of IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.

Data Strategy and Management		
Title	**Description**	**Requirements**
	single sources of data.	
Database Administrator	Manages and maintains all production and non-production databases. Responsible for standards and design of physical data storage, maintenance, access and security administration. Performs backup and recovery on Database Management Systems, configures database parameters, and prototype designs against logical data models, defines data repository requirements, data dictionaries and warehousing requirements. This position optimizes database access and allocates/re-allocates database resources for optimum configuration, database performance and cost.	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.

Quality Assurance		
Title	**Description**	**Requirements**
Manager, Quality Assurance	Responsible for managing the definition, implementation and integration of quality principles and quality processes into the design and development of software and IT processes. Ensures that quality methods and procedures are executed. Ensures that products, applications, and systems are in compliance with established quality standards, and meet customer requirements. Analyzes best-in-class processes, establishes customer satisfaction metrics, understands the interaction and relationship of business operations and operating systems and network processes. Champions the application of quality principles in business and IT processes through training, meeting and team facilitation, communication programs and team building activities. Responsible for researching, developing and implementing testing methods and procedures. Ensures that products meet the highest quality standards. Monitors and reports on defects.	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of IT work experience. Requires prior management, supervisory or team leader experience. **Breadth:** Works under general direction. Manages and mentors staff and/or more junior management staff.
Quality Assurance Analyst	Responsible for developing and executing formal test plans to ensure the delivery of quality software applications. Involved in test planning, writing test cases/scripts, test case automation and test execution. Defines and tracks quality assurance metrics such as defects, defect counts, test results and test status. Collects and analyzes data for software process	**Education:** Bachelor's Degree in Computer Science, Information Systems, or similar. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of IT work experience. **Complexity:** Works independently or as a

Quality Assurance		
Title	**Description**	**Requirements**
	evaluation and improvements, and integrates them into business processes to address the business needs. Documents all problems and assists in their resolution. Delivers quality process training to technical staff and acts as an internal quality consultant to advise or influence business or technical partners. Performs quality audits across the various IT functions to ensure quality standards, procedures, and methodologies are being followed.	part of a team under general supervision. May coach more junior technical staff.

Technology Research		
Title	**Description**	**Requirements**
Manager, Technology Research	Understands the strategic direction of enterprise and the supporting IT systems and architectures. Maintains knowledge of emerging technological trends and utilizes this knowledge to educate both IT and the business of opportunities to build better IT solutions that support and drive business decisions. Assists in the definition of the architecture and technology needs of the organization based on new and emerging technologies, and establishes priorities and strategies consistent with business goals and economic viability. Establishes foundation architecture for organization to standardize on hardware and software usage. Serves as a consultant and advisor to senior IT leadership on advanced technologies and evaluates the business impact through cost/benefit analysis. Recommends and incorporates technology with long-term business plans. Transfers knowledge of key learnings throughout the enterprise, and establishes and communicates strategic and technological plans.	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of IT work experience. Requires prior management, supervisory, or team leader experience. **Breadth:** Works under general direction. Manages and mentors staff and/or more junior management staff.
Technology Research Analyst	Maintains a strong understanding of the enterprise's IT systems and architectures. Assists in the analysis of the requirements for the enterprise and applying emerging technologies to support long-term business objectives. Responsible for researching, collecting, and disseminating information on emerging technologies and key learnings	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of

Technology Research		
Title	**Description**	**Requirements**
	throughout the enterprise. Researches and recommends changes to foundation architecture. Supports research projects to identify and evaluate emerging technologies. Interfaces with users and staff to evaluate possible implementation of the new technology in the enterprise, consistent with the goal of improving existing systems and technologies and in meeting the needs of the business. Analyzes and researches process of deployment and assists in this process.	IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.

Client Technologies		
Title	**Description**	**Requirements**
Manager, Client Technologies	Responsible for providing IT users with desktop equipment and support, determining user needs and incorporating them into the design and overall plan for desktop support. The range of accountabilities minimally covers hardware and software planning, vendor selection, acquisition, Tier II problem resolution, set-up, integration, testing and installation. Works with organizations supported to establish performance metrics to ensure needs are being properly met. Monitors and analyzes performance metrics, sharing results with users. Organizes and coordinates the activities associated with installation, deployment and upgrade of software, hardware and network facilities as it relates to the desktop environment. Desktop applications may include productivity tools, email, and applications that are used by groups without programming customization. Evaluates and provides techniques for increasing user desktop productivity.	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of IT work experience. Requires prior management, supervisory, or team leader experience. **Breadth:** Works under general direction. Manages and mentors staff and/or more junior management staff.
Client Technologies Analyst -	Configures, installs, monitors, and maintains IT users' desktop software and hardware; supports mobile workforce. Provides consultation to IT users for all aspects of end-user computing and desktop-based LAN systems software. Provides technical support and guidance through Tier II support and works with vendors to resolve Tier III issues.	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of IT work experience. **Complexity:** Works independently or as a part of a team under general supervision.

Client Technologies		
Title	**Description**	**Requirements**
	Responsible for documenting solutions to problems and developing end-user guidelines. May provide on-the-spot training to users. Evaluates, maintains, modifies (e.g., creates macros, templates) and documents desktop application packages, participates in the testing and evaluation of new desktop packages, and implements prototypes. Consults with and makes recommendations to IT users on selection of hardware and software products to address business requirements.	May coach more junior technical staff.
Client Technologies Technician	Configures and installs software for IT users' desktops and laptops. Involved in the installation and rollout of new software packages, upgrades and new desktop hardware. Maintains desktop software and hardware; supports mobile workforce. Provides Tier II support to IT users for basic software and hardware of end-user computing and desktop-based LAN systems. Troubleshoots problems using scripts and checklists as guides. Escalates to Tier III support when necessary. Documents problems and resolutions. May perform end-user training. Strong customer service skills are important in this position. Participates in the testing and evaluation of new desktop packages and implements prototypes.	**Education:** Associate's or Bachelor's Degree, or technical institute degree/certificate. Or equivalent work experience. **Experience:** Typically has 1 to 2 years of IT work experience. **Complexity:** Acts under consistent and direct supervision, generally following documented procedures and checklists.

Customer Support		
Title	**Description**	**Requirements**
Manager, Customer Support	Defines service levels, service agreements and manages the help desk operation. Establishes processes to identify, track, escalate, resolve and report customer problems. Jointly, with the customer, defines standards and measures for quality and customer satisfaction requirements. Analyzes the technical performance and reliability of products, systems and services against identified industry standards to ensure customer satisfaction. Responsible for developing and implementing technical service restorations and troubleshooting procedures for identifying, testing and diagnosing computer system and peripheral equipment faults.	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of IT work experience. Requires prior management, supervisory, or team leader experience. **Breadth:** Works under general direction. Manages and mentors staff and/or more junior management staff.
Customer Support Analyst	Responsible for Tier I and II software and hardware support. Provides technical advice, guidance and informal training to customers using hardware and software programs. Troubleshoots and restores routine technical service and equipment problems by analyzing, identifying and diagnosing faults and symptoms using established processes and procedures. Performs root cause analysis and develops checklists for typical problems. Recommends procedures and controls for problem prevention. Maintains knowledge database and call tracking database to enhance quality of problem resolutions. Works in a team setting, sharing information and assisting others with calls.	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 2 to 5 years of IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.

Customer Support		
Title	**Description**	**Requirements**
Customer Support Technician	Responsible for Tier I software and hardware support. Diagnoses and resolves problems using documented procedures and checklists in the performance of most responsibilities. Enters call data into a tracking system. Escalates problems to higher level technical support professionals when necessary. Assists in the resolution of application, hardware, and software problems.	**Education:** Associate's or Bachelor's Degree, or technical institute degree/certificate in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 1 to 2 years of IT work experience. **Complexity:** Acts under consistent and direct supervision, generally following documented procedures and checklists.

Network Management		
Title	**Description**	**Requirements**
Director, Network Operations	Responsible for developing business and technology standards and best practices for department. Overall responsibility for all network operations work, including the integration of new network technologies such as wireless. Develops enterprise service levels for data and voice networking equipment and for both in-house and third party software applications. Oversees development of procedures and processes for enterprise network operations. Responsible for ensuring that the enterprise has the capability to support new technologies and maintain high levels of network performance and reliability. Approves, plans and budgets for all assets in area of responsibility.	**Education:** Bachelor's or Master's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 10 -15 years of IT and business/industry work experience, with at least 3 years of experience in a leadership role. **Breadth:** Overall responsibility for department decisions and management. Coaches and mentors more junior management staff.
Manager, Network Operations	Responsible for network operations and service levels for data and voice networking equipment and software including mainframe equipment, PBX, mid-range and network processing devices. Develops and implements standards, procedures, and processes for the network operations group. Plans and manages the support of new technologies (including wireless), network performance, and reliability. Defines and negotiates service level agreements. Oversees and coordinates the daily activities of the network operations center. Plans for human resources, equipment arrangements, electrical power and cable requirements for	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of IT work experience. Requires prior management, supervisory, or team leader experience. **Breadth:** Works under general direction. Manages and mentors staff and/or more junior management staff.

Network Management		
Title	**Description**	**Requirements**
	telecommunications and information processing equipment.	
Network Architect	Responsible for high level network planning, design, and optimization. Develops strategies and direction for network systems solutions using current and emerging technologies (including wireless). Translates business requirements into network or process designs. Plans and recommends network hardware, systems management software and architecture. Approves and modifies network design and architecture to ensure compliance. Configures and maintains routers, switches, and hubs for the network systems (including wireless). Evaluates and recommends new products, maintains knowledge of emerging technologies for application to the enterprise. Monitors network performance, ensures capacity planning is performed, and is proactive in assessing and making recommendations for improvement. Performs troubleshooting procedures and designs resolution scripts. May take on role of Project Leader for special enterprise-wide assignments.	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of IT work experience. **Complexity:** Technical expert in IT organization. Coaches and mentors more junior technical staff. Provides input into highly complex and high impacting decision as it relates to area of expertise.
Network Engineer	Assists in the planning, forecasting, implementation, and identification of resource requirements for network systems (including wireless) of moderate complexity. Participates in network planning, network architecture design and engineering. Integrates and schematically depicts	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of

Network Management		
Title	**Description**	**Requirements**
	communication architectures, topologies, hardware, software, transmission and signaling links and protocols into complete network configurations. Evaluates new products, performs network problem resolution and assists in the development and documentation of technical standards and interface applications. Monitors protocol compatibility, performs system tuning, and makes recommendations for improvement.	IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.
Network Analyst	Responsible for designing, installing, and troubleshooting network systems (including wireless) to meet the functional objectives of the business. Involved with the configuration and maintenance of physical and logical network components. Assists in the design of the network architecture, designs the network infrastructure, and plans and designs LAN/WAN/wireless solutions. Performs capacity and resource planning, assessing network risks and contingency planning. Responsible for the implementation and maintenance of network management software; researching, analyzing, and implementing software patches or hardware changes to fix any network deficiencies. Provides Tier II support. Involved in the evaluation of new products and services, may manage vendor service level agreements.	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.

Network Management		
Title	**Description**	**Requirements**
Network Administrator	Monitors, troubleshoots and maintains network (LAN, WAN and wireless) multiplexers, hubs and routers, and uses remote monitoring tools. The duties of this position can be broad and may include such tasks as installing new workstations and other devices, adding and removing individuals from the list of authorized users, archiving files, overseeing password protection and other security measures, monitoring usage of shared resources, and handling malfunctioning equipment. Selects, develops, integrates and implements network management applications for Internet components.	**Education:** Bachelor's Degree or technical institute degree/certificate in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.
Network Technician	Provides daily operations support and maintenance for network systems (including wireless). Proactively monitors networks to provide stable, dependable network services across multiple platforms. Configures and troubleshoots computer networks. Maintains LAN/WAN/wireless operations by working with network facility and hardware/software vendors to ensure timely problem resolution. Maintains and utilizes network management applications to identify network faults, to ensure the provision of data or other telecommunications access to customers, and the movement of information from one location to the other.	**Education:** Associate's or Bachelor's Degree, or technical institute degree/certificate in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 1 to 3 years of IT work experience. **Complexity:** Acts under consistent and direct supervision, generally following documented procedures and checklists.

Network Management		
Title	**Description**	**Requirements**
Network Security Specialist	Involved in the full life cycle of network security management. Assists in the development and implementation of security policies, procedures and measures in a networking environment. Responsible for firewall configuration, maintenance, monitoring and other various network security measures. Performs security assessments and reviews networking initiatives for security compliance. Prepares status reports on security matters to develop security risk analysis scenarios and response procedures. Involved in the continual improvement of the network infrastructure and implementation of new security-based technologies. Evaluates and recommends security products for various platforms in the networking environment. Educates users about network security policies and consults on security issues. Must have broad technical knowledge of client/server, network topology, and network/infrastructure security.	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of combined IT and security work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.

Internet Planning, Engineering and Operations		
Title	**Description**	**Requirements**
Manager, Internet Operations	Responsible for the development, release, and maintenance of Internet, Intranet, and Extranet systems and services supporting a wide range of content. Works with key business leaders and other IT groups to prioritize projects, maximize the effectiveness of Internet technologies in supporting the business strategy, improving communications, and enabling greater access to information. Ensures the coordination of all Internet and web development activities, ensuring integration with other technologies utilized in the enterprise and continuity across applications. Develops standards for Internet and web project initiation, design, development, and support. Key challenge of this position is in managing and prioritizing the numerous requests by the business, and influencing and coordinating the development of Internet based technologies occurring in areas outside of IT.	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of IT and business work experience. Requires prior management, supervisory, or team leader experience. **Breadth:** Works under general direction. Manages and mentors staff and/or more junior management staff.
Internet/Web Architect	Responsible for gathering business requirements and translating them into Internet/web architecture to achieve business objectives. Analyzes assigned specifications, planning, designing, and developing solutions, utilizing appropriate Internet/Intranet/Extranet architecture processes supporting a wide range of content - either individually or in concert with project team members. Provides	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 5 to 7 years of IT work experience. **Complexity:** Works independently or as a

Internet Planning, Engineering and Operations		
Title	**Description**	**Requirements**
	appropriate documentation for object design decisions, estimating assumptions, applets, and performance metrics - as required by organization architecture process standards, or as assigned. Responsible for minimizing the issues between the client and the server applications and for the overall set-up and design of the Internet and web server architecture. Impact and complexity of this job increases if organization is utilizing Internet solutions (vs. only Intranet), especially those with significant business impact (e.g., e-business).	part of a team under general supervision. May coach more junior technical staff. Technical expert in IT organization. Provides input into highly complex and high impacting decisions as it relates to area of expertise.
Webmaster	Accountable for the design, upgrading, enhancement, maintenance, availability, and effectiveness of technical functionality and content for one or more web sites of the enterprise. Coordinates the publishing of web site content, user interface, look/feel and level of specificity to suit a wide range of needs. Responsible for working closely with marketing and systems teams to coordinate content, developing on-going site structure and updates. Knowledge and experience in HTML, including style sheets, templates, complex tables, frames, image maps, CGI programming, applets, animation, multimedia design and delivery, and web publishing procedures, is essential. Primary focus is generally on gathering requirements that relate to the organization's business objectives relative	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 4 to 6 years of IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.

Internet Planning, Engineering and Operations		
Title	**Description**	**Requirements**
	to site audiences, and continuous content updates and site upgrades to enhance site hits/visits. Webmaster in a junior role would focus more extensively on programming content rather than the technical aspects of this position. Impact and complexity of this job increases if organization is utilizing Internet solutions (vs. only Intranet), especially those having significant business impact (e.g., e-business).	
Web Applications Programmer	Develops, maintains, and supports applications for the organization's Internet/Intranet sites. Gathers and analyzes requirements. Programs all or selected components of web applications. Documents components and applications. Develops automation techniques to enable end-user content publishing; programs, tests and implements mapped graphic images, forms and HTML pages; handles client browser support inquiries; maintains links to external sites and accuracy on internal links while ensuring up-to-date information. Researches, evaluates and recommends new Internet tools and applications for use in assigned responsibilities. The senior level Web Applications Programmer has experience in a variety of the more difficult Web tools and languages.	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.
Internet/Web Engineer	Integrally involved in the development and support of all Internet/Intranet/Extranet sites	**Education:** Bachelor's Degree in Computer Science, Information

Internet Planning, Engineering and Operations		
Title	**Description**	**Requirements**
	and supporting systems. Works closely with other IT groups and customers to define the system design and user interface based on customer needs and objectives. Participates in all phases of the development and implementation process, and may act as a project manager on special projects. Ensures the integration of the web servers and all other supporting systems. Responsible for system tuning, optimization of information/data processing, maintenance and support of the production environment.	Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 4 to 6 years of IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.
Internet/Web Systems Administrator	Responsible for ensuring the control, integrity, and accessibility of the Internet/Intranet for the enterprise. Responsible for change management procedures regarding the installation and testing of all upgrades and enhancements for the Internet/Intranet infrastructure. Responsible for proper initial installation as well as subsequent installations of updates/patches; preparation of system documentation; proactive, regular checks of system components for errors and application of necessary corrective action; set-up and maintenance of Web servers. Knowledgeable in all levels of Internet/web security and the associated requirements for their application. Designs, develops and administers firewalls as a means of preventing unauthorized access to	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.

Internet Planning, Engineering and Operations		
Title	**Description**	**Requirements**
	enterprise networks. Provides technical support to internal users and external customers; troubleshoots problems and takes corrective action on a timely, effective basis.	
Web Customer Support Specialist	Responsible for providing support services to users of Internet and Extranet sites. Provides technical advice and guidance relative to problems involving user interface, browser, hardware and supporting software. Troubleshoots and restores routine technical service and equipment troubles by analyzing, identifying and diagnosing faults and symptoms using established processes and procedures. Maintains a knowledge database and call tracking database to enhance quality of problem resolutions. Coordinates efforts with the Help Desk to ensure all calls outside the customer environment are effectively resolved. Works in a team setting, sharing information and assisting others with calls. Provides input to web development team for site improvements based on customer feedback. This job is very similar to an experienced Help Desk professional, with the added responsibility of interfacing directly with external customers to the business. As a result, customer service and technical competencies are very critical, as	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.

Internet Planning, Engineering and Operations		
Title	**Description**	**Requirements**
	this may be the only "live" interface a customer has with the business.	
Web Designer	Responsible for the design, development and creation of user-centered designs for web sites. Responsibilities include human factors engineering, heuristic evaluations, and usability testing for web and client based applications as well as metrics setting and monitoring designed to assess the usability of the web application. Works to improve the usability, usefulness, and desirability of web sites in collaboration with Graphic Designers, Product Managers, Engineering Staff, and other Web Designers. Must be able to perform usability tests, provide design prototypes, and provide ad hoc user interface consulting. Responsible for requirements gathering and articulation of user interface issues - including development of page/site prototypes. Must be knowledgeable of user-centered design methodology, user scenarios, usability testing, storyboarding, paper and interactive prototypes. Must have demonstrated skills in graphic applications, HTML development tools and other applicable authoring tools, web production, front-end development using programming and scripting languages.	**Education:** Bachelor's Degree in Computer Science, Information Systems, Graphic Design, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of combined IT and graphic design experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.

Internet Planning, Engineering and Operations		
Title	**Description**	**Requirements**
	Must be able to integrate design into program rules and system architecture and create innovative approaches to improving the end-user experience. Must be familiar with platform/browser compatibility and basic usability issues.	
Web Security Specialist	Assists in the development and management of web security policy and procedures for the enterprise. Evaluates information security solutions on Inter/Intranet/Extranet environments. Responsible for monitoring, assessing and reviewing rule base and configurations of firewalls and intrusion detection systems. Performs security assessment reviews of the e-commerce applications for compliance to security policies, standards and practices. Reviews software products and recommends security solutions for various platforms and initiatives. Educates users on the web security standards and practices. Reviews and prepares status reports on security matters to develop security risk analysis scenarios and response procedures. Ensures compliance to security policies and procedures by administering and monitoring security profiles; reviews security violation reports and investigates possible security exceptions; updates, maintains and documents security	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of combined IT and security experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.

Internet Planning, Engineering and Operations		
Title	**Description**	**Requirements**
	controls. Must have knowledge of client/server and web technologies and a strong understanding of e-commerce operations.	

Operations		
Title	**Description**	**Requirements**
Director, Data Center Operations	Responsible for the overall enterprise-wide effectiveness and efficiency of data center technology systems and networks and in ensuring high levels of customer satisfaction are maintained. Leads the migration to new technologies, evaluates processing performance relating to machine utilization and reliability, and forecasts financial, physical, and human resource needs to meet established objectives. Oversees and coordinates network/data operations, business continuance and restoration plans that isolate troubles and implement pre-planned alternative routes or systems to restore service.	**Education:** Bachelor's or Master's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 10 to 15 years of IT and business industry work experience, with at least 3 years of experience in a leadership role. **Breadth:** Overall responsibility for department decisions and management. Coaches and mentors more junior management staff.
Manager, Computer Operations	Responsible for the activities in the areas of production, data control, operations, and operations support. Develops and implements standards, procedures, and processes for the operations group. Plans and manages the support of new technologies, data center performance, and reliability. Defines and negotiates service level agreements. Oversees and coordinates the daily activities of the operations center. Provides input and recommendations regarding business continuance issues and improvements to the operations of systems and processes supported.	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 more years of IT work experience. Requires prior management, supervisory, or team leader experience. **Breadth:** Works under general direction. Manages and mentors staff and/or more junior management staff.
Supervisor, Computer Operations	Supervises the computer operations within	**Education:** Associate's or Bachelor's

Operations		
Title	**Description**	**Requirements**
	the data center. Responsible for the day-to-day assignments of staff, and the follow-up of their work performance. Manages the daily activities to resolve problems and change management issues. Responsible for production systems' online response time. Maintains system availability, prepares metrics to evaluate systems performance, and works with IT groups and users to ensure that service objectives are met.	Degree or technical institute degree/certificate in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 5 to 7 years of IT work experience. **Breadth:** Works under minimal supervision. Manages and mentors staff.
Computer Operator	Responsible for monitoring multi-technology computing platforms including midrange platforms, mainframes and/or servers. Responsible for ensuring a stable operating environment and attaining maximum utilization of system facilities. Operates and monitors console systems and peripheral equipment such as printers, disk drives and tape readers. Troubleshoots and restores routine technical service and peripheral equipment, schedules production runs, performs system backup process, disaster recovery tests, loads tapes, disks and paper as needed. Assists programmers and systems analysts in running jobs that are used for testing and debugging new programs.	**Education:** Associate's or Bachelor's Degree or technical institute degree/certificate in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 0 to 1 year of IT work experience. **Complexity:** Acts under consistent and direct supervision, generally following documented procedures and checklists.
Manager, Capacity Planning	Develops, manages, and forecasts capacity requirements based on business needs and IT infrastructure growth capacity. Facilitates the development of policies to	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or

Operations		
Title	**Description**	**Requirements**
	ensure that existing capacity is being used as efficiently as possible. Ensures data recovery, maintenance, data integrity, and space requirements are met across a variety of platforms. Ensures that capacity workload modeling and availability analysis is performed for a variety of platforms and large environments. Serves as an expert resource to IT groups in planning the resource requirements for systems under development. Presents statistical availability and trend analysis and recommendations to IT management, IT leadership, and the business, as needed. Ensures reliability and availability of platforms to meet business objectives.	equivalent work experience. **Experience:** Typically has 7 to 10 years of IT work experience. Requires prior management, supervisory, or team leader experience. **Breadth:** Works under general direction. Manages and mentors staff and/or more junior management staff.
Manager, Production Support	Manages the daily operations of the Production Support group. Develops and implements policies and procedures for the production support function which includes operator training and development, data center scheduling, installation and re-start and recovery procedures. Monitors and reports all production outages. Performs proactive analysis on all factors impacting high availability and service level attainment. Requires interaction with appropriate IT and business unit personnel. This position requires in-depth knowledge of computer operations, monitoring and control, systems recovery and production	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of IT work experience. Requires prior management, supervisory, or team leader experience. **Breadth:** Works under general direction. Manages and mentors staff and/or more junior management staff.

Operations		
Title	**Description**	**Requirements**
	processing control.	
Production Support Analyst	Manages and controls the processing of programs and peripheral equipment on mainframe and/or distributed computer systems to ensure the highest levels of service and system availability are attained. Establishes production runs, ensuring that appropriate job control language, run documentation and data files are available. Assists in job set-up. Performs problem identification, escalation and resolution. Communicates status of operations to allow for immediate response to service disruptions.	**Education:** Bachelor's Degree in Computer Science, Information Systems, or a related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.

Telecommunications		
Title	**Description**	**Requirements**
Manager, Telecommunication Operations	Manages the operations, daily planning, engineering, design, and resource allocation for the enterprise's telecommunications functions. Ensures customer satisfaction through quality standards and measures by evaluating the performance of telecommunications networks and related interfaces. Responsible for strategic telecommunications planning and works with senior IT leadership to coordinate telecommunication plans with those of the business. Develops and implements standards, procedures, and processes for the telecommunications group. Plans and manages the support of new technologies, performance, and reliability. Defines and negotiates service level agreements. Oversees and coordinates the daily activities of the operations center. Performs a coordination role with enterprise management, vendors and customers.	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of IT work experience. Requires prior management, supervisory, or team leader experience. **Breadth:** Works under general direction. Manages and mentors staff and/or more junior management staff.
Telecommunication Engineer	Responsible for engineering and/or analytical tasks and activities associated with areas within the telecom function (e.g., network design, engineering, implementation, diagnostics or operations/user support). Monitors the operation of telecommunications voice and data network systems. Performs complex tasks relating to network operations, installation, and/or maintenance for local,	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of IT work experience. **Complexity:** Works independently or as a part of a team under general supervision.

Telecommunications		
Title	**Description**	**Requirements**
	off-site and/or remote locations. The scope of responsibility for this position includes, but is not limited to, the configuration, deployment, testing, maintenance, monitoring, and trouble-shooting of network components to provide a secure, high performance network. Duties also entail quality assurance and testing of transmission mediums and infrastructure components. Serves as technical specialist/lead on a functional basis, for the resolution of complex network problems. Experience should include: moves, adds and changes, fault isolation and resolution, and end-user support. Requires broad knowledge of voice and data communications systems, dial plans, switching architecture, telephony and wiring.	May coach more junior technical staff.
Telecommunication Technician	Under direct supervision, monitors, operates, installs and maintains telecommunications systems and equipment in addition to troubleshooting any type of hardware or software problems to ensure that systems perform in a manner which best meets business needs and objectives. Responsible for the installation, maintenance and repair of voice and/or data communications equipment. Assists in the installation of telecommunications systems and equipment for new company	**Education:** Associate's or Bachelor's Degree, or technical institute degree/certificate in Computer Science, Information Systems or other related field. Or equivalent work experience. **Experience:** Typically has 1 to 2 years of IT work experience. **Complexity:** Acts under consistent and direct supervision, generally following documented procedures and

Telecommunications		
Title	**Description**	**Requirements**
	facilities. Performs network software installations and maintenance of network database for maintenance and billing support. Possesses knowledge of data scopes, patch panels, modems and various analog and digital signaling systems. Must demonstrate thorough knowledge of T-1 network architecture and operating procedures. Knowledge of line control techniques and communication access methodology is needed. Must be able to read engineering drawings and terminate cables and grounding systems.	checklists.

Electronic Commerce		
Title	**Description**	**Requirements**
Director, Electronic Commerce	Responsible for creation, implementation and management of the enterprise's systems in support of business e-commerce. Collaborates with business leadership in the development of an e-commerce strategy and in the prioritization of development work. Must understand business processes. Ensures integration of Internet/Extranet systems architecture with existing enterprise architecture. Develops and implements e-commerce service concepts including: pricing, packaging, product offerings and lifecycle management. Develops site transaction and partnership strategy. Works with appropriate senior management to analyze customer feedback, develop promotional plans, and target marketing for product and service concepts. Possesses overall project management responsibility for all e-commerce development work. Responsible for the integration of the web site with Product Development, Customer Service and Sales organizations. Manages content creation, input from other marketing groups and editorial calendar. Identifies and manages technology development partners and outside vendors. Maintains currency of new technology and evaluates opportunities for improvement. May manage a team of product managers and content editors.	**Education:** Bachelor's or Master's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 10 to 15 years of IT and business/industry work experience, with at least 3 years of experience in a leadership role. **Breadth:** Overall responsibility for department decisions and management. Manages and mentors staff or more junior management staff.
Manager, Electronic Commerce	Partners with business units to develop	**Education:** Bachelor's Degree in Computer

Electronic Commerce		
Title	**Description**	**Requirements**
	creative solutions using e-Commerce technology that will enhance the enterprise's competitive advantage. Directs the implementation of e-Commerce services and businesses for the enterprise or specific business units. Responsible for the daily management of e-Commerce activities and staff. Possesses professional experience and knowledge in a variety of net-centric computing architectures and technologies. Possesses an operational knowledge of key business processes and understands the technology either utilized or needed for their operation. Strong Project Management expertise is essential.	Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of IT work experience. Requires prior management, supervisory, or team leader experience. **Breadth:** Works under general direction. Manages and mentors staff and/or more junior management staff.
Electronic Commerce Analyst	Responsible for the analysis, development, maintenance and support of e-Commerce software programs to ensure the needs of the business community are appropriately addressed. Works closely with vendors and trading partners. Duties include the creation and trading of partner profiles, mapping of transactions, establishment of communication links with trading partners and the testing of secure transaction maps and communication links to ensure security, proper identification and capture of required data. Identifies and documents programming requirements for all new transactions. Assists in the development and documentation of policies and procedures for the e-Commerce function.	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.
EDI Specialist	Provides technical expertise and support	**Education:** Bachelor's Degree in

Electronic Commerce		
Title	**Description**	**Requirements**
	for Electronic Data Interchange (EDI), and other Business-to-Business communications. Analyzes and develops the EDI interface. Participates in systems design and quality assurance activities. Supports the user community and creates and maintains partner relationships with customers and vendors. Responsible for developing EDI mapping specifications and documentation. Duties include testing, implementing and maintaining EDI transactions, developing and maintaining trading partner definitions including relevant translation objects utilizing EDI translation software tools. Handles communications with trading partners for EDI transaction set-up and ongoing maintenance. Coordinates between trading partners and networks to ensure mapping compliance. Tests and resolves incoming EDI file problems. Develops new business opportunities utilizing EDI. Resolves technical mapping variations or gaps and first-level troubleshooting issues in production environment. Develops guidelines, checklists, procedures and training documentation. Often involved with a variety of client/server platforms.	Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years IT or related work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.

Electronic Commerce		
Title	**Description**	**Requirements**

Business Intelligence Systems Management		
Title	**Description**	**Requirements**
Director, Data Warehouse -	Responsible for the overall architecture, design, development, and maintenance of data warehousing and data mart systems and services for the entire enterprise's business function. Works closely with their customers from a strategic perspective to identify and maximize opportunities to utilize data marts and/or data warehouse systems to improve business processes, promote the strategic use of information technology, and enable the work force to use technologies as a competitive tool. Ensures the development of enterprise-wide standards for the Data Warehouse to ensure compatibility and integration of multi-vendor platforms. Responsible for organizational balance and system coherency between front-end desktop/client environment and Data Warehouse back-end processing functions. Provides corporate leadership, vision, and direction for data warehouse systems, in support of the enterprise's business objectives and requirements.	**Education:** Bachelor's or Master's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 10 to 15 years of IT and business/industry work experience, with at least 3 years of experience in a leadership role. **Breadth:** Overall responsibility for department decisions and management. Coaches and mentors more junior management staff.
Manager, Data Warehouse	Works with the business and Senior IT leadership to identify and establish information requirements, develop and implement data warehouse strategies that utilize data marts and/or data warehouse systems to enhance business processes and manage business intelligence. Leads the activities of	**Education:** Bachelor's degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of IT work experience. Requires prior management,

Business Intelligence Systems Management		
Title	**Description**	**Requirements**
	data warehouse project teams in the design, development and implementation of data warehouses; and the configuration and auditing of data warehouses to ensure quality control of data. Responsible for overseeing the development, operations and maintenance of data warehouse environment, including organizational balance and system coherency between front-end desktop/client environment and data warehouse back-end processing functions. Provides guidance regarding the use of data warehouse system, capability of systems to deliver information, and subject matter expertise regarding current systems and emerging technology. Needed knowledge includes process and data modeling, data architectural development methodology, project management, and extensive knowledge of data warehouse and data mart.	supervisory or team leader experience. **Breadth:** Works under general direction. Manages and mentors staff and/or more junior management staff.
Business Intelligence Analyst	Responsible for leading the design and support of enterprise-wide business intelligence applications and architecture. Works with enterprise-wide business and IT senior management to understand and prioritize data and information requirements. Solves complex technical problems. Optimizes the performance of enterprise business intelligence tools by	**Education:** Bachelor's degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of experience with large and complex database management systems, business intelligence tools and systems.

Business Intelligence Systems Management		
Title	**Description**	**Requirements**
	defining data to filter and index that add value to the user. Creates testing methodology and criteria. Develops data/information quality metrics.	**Complexity:** Works independently or as a part of a team under general supervision. Expert/lead technical role. May coach more junior staff.
Data Warehouse Analyst	Responsible for gathering and assessing business information needs and preparing system requirements. Performs analyses, development and evaluation of data mining in a data warehouse environment which includes data design, database architecture, metadata and repository creation. Uses data mining and data analysis tools. Reviews and validates data loaded into the data warehouse for accuracy. Interacts with user community to produce reporting requirements. Provides technical consulting to users of the various data warehouses and advises users on conflicts and inappropriate data usage. Responsible for prototyping solutions, preparing test scripts, and conducting tests and for data replication, extraction, loading, cleansing, and data modeling for data warehouses. Maintains knowledge of software tools, languages, scripts, and shells that effectively support the data warehouse environment in different operating system environment. Possesses working knowledge of Relational Database	**Education:** Bachelor's degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior staff.

Business Intelligence Systems Management		
Title	**Description**	**Requirements**
	Management Systems (RDBMS) and data warehouse front-end tools. Must have an extensive knowledge of data warehouse and data mart concepts.	
Data Warehouse Administrator	Provides data warehouse support functions including database maintenance, development and enhancement. Performs database administration functions such as loading data into database from external sources, supports users in constructing queries and generating output files. Responsible for on-going design and performance enhancement, which include reviewing queries for performance issues, estimating, monitoring and tuning the warehouse as it operates. Develops and administers processes to ensure interoperability and security of data warehouse system. Must possess a strong understanding of source data, data modeling, and data repository requirements.	**Education:** Bachelor's degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior staff.
Manager, Decision Support	Acts as liaison between business and IT leadership regarding the identification of business critical information and knowledge (e.g., customer and market data), and its usage and availability. Manages the Decision Support staff to ensure that the Decision Support Systems (DSS) and Executive Information Systems (EIS) are built to meet the information needs of the business leadership and	**Education:** Bachelor's Degree in Computer Science, Information Systems, Business Administration, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of IT work experience. Requires prior management, supervisory or team leader

Business Intelligence Systems Management		
Title	**Description**	**Requirements**
	various business units. Has full understanding of corporate strategies and must manage the diversity of needs and prioritize those needs based on the overall business strategy of the organization. Works closely with key business leaders to define critical information needs, providing guidance regarding availability of data, capability of systems to deliver information needs, and subject matter expertise regarding current systems and emerging technology. Leads the research, evaluation, and selection of new technologies. Leads cost and feasibility studies. Ensures project management process is in place, provides resource management, and ensures quality and timely solutions. Needed knowledge includes process and data modeling, data architectural development methodology, IT planning methodology, consulting and facilitation, project management, and extensive knowledge of the enterprise's data and decision-making processes.	experience. **Breadth:** Works under general direction. Manages and mentors staff and/or more junior management staff.
Decision Support Specialist	Works closely with customers and design teams in prioritizing data and information requirements. Determines how Decision Support Systems (DSS) and Executive Information Systems (EIS) will provide the information required to make effective business decisions; translates	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of

Business Intelligence Systems Management		
Title	**Description**	**Requirements**
	requirements into applications that employ appropriate decision support and reporting tools. Involved in the design, development and maintenance of DSS. Performs modeling of data sources and flows, works with data management staff to define an operational framework that will define, develop and implement DSS, EIS, policies and security frameworks to ensure precise and secure delivery of knowledge and information. Monitors system performance, implements changes to optimize performance. Involved in the selection of new products. Needed skills and knowledge includes process and data modeling, DSS architecture and tools, development life cycle methodologies, IT planning methodology, extensive knowledge of the enterprise's data and decision-making processes.	IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.
Decision Support Administrator	Supports the user community in the use of business intelligence tools to query files and databases for report outputs. Assists customers in use of OLAP tools, extracts and collects data for performing queries and writing reports. Reviews queries for performance issues, making changes as needed. Participates in the design and development of the system, as well as creation of user documentation. Monitors customer usage, upgrades enterprise-wide	**Education:** Associate's or Bachelor's Degree or technical institute degree/certificate in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 1 to 3 years IT work experience. **Complexity:** Acts under consistent and direct supervision, generally following

Business Intelligence Systems Management		
Title	**Description**	**Requirements**
	OLAP query and reporting tools, monitors batch queries, and ensures interoperability and security of various front-end components. Maintains meta data coordination, and supports production system. Needed knowledge includes process and data modeling and data architectural development methodology.	documented procedures and checklists.
Knowledge Engineer	Responsible for developing an infrastructure and process to capture knowledge gained by the organization through successful system interventions and enabling its shared use. Oversees the identification of critical knowledge, its usage, availability and the needs of various business groups. Involved in modeling information sources, flows and critical paths, as well as understanding how information is turned into knowledge and the relationship of knowledge and how it supports and enables key business processes. Facilitates the development of supporting knowledge architecture and standards. Works with operations staff to define an operational framework that defines, develops and implements delivery systems, systems management, policies and security frameworks to ensure delivery of knowledge and information to appropriate groups. Possesses expertise in process and data	**Education:** Bachelor's or Master's Degree in Computer Science, Information Systems, Business Administration, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of IT and business/industry work experience. **Complexity:** Works under general supervision. Coaches and mentors more junior technical staff.

Business Intelligence Systems Management		
Title	**Description**	**Requirements**
	modeling, architectural development methodologies, IT planning methodologies, and extensive knowledge of the enterprise's business and decision-making processes. Must possess strong leadership skills to gain credibility with various business leaders and stakeholders. Makes complex IT and business decisions. Works with other IT groups to ensure solid cross-functional decisions are made as a team.	

Enterprise Resource Planning (ERP)		
Title	**Description**	**Requirements**
ERP Configurer	Performs functional analysis, requirements, definition and ERP module configuration and testing. Responsible for conducting prototypes, developing functional specifications, data mapping, function mapping, setting of configuration tables, and setting of transaction/control tables. Has a thorough understanding of the business processes and flows to enable the analysis of business requirements and the development of solutions for the business functions. Responsible for the identification of and resolution of gaps in the business processes. Involved in security/authorization set-up, user documentation, data interface design, data migration and reconciliation. May be involved in the installation and tuning of modification, as well as archiving data. Generally this position has light programming skills in the appropriate language to develop necessary "work arounds".	**Education:** Bachelor's Degree in Computer Science, Information Systems, Business Administration, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.
ERP Programmer/Analyst	Applies system solutions to business problems through the design and programming of automated systems. Configures, analyzes, designs, develops, and maintains ERP program codes and applications to support business processes and functions. Works on elements of large, complex installations. Performs all aspects of programming assignments, and assists with systems design. Fully knowledgeable	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of IT work experience. **Complexity:** Works independently or as a

Enterprise Resource Planning (ERP)		
Title	**Description**	**Requirements**
	in ERP programming languages. Applies knowledge and experience with technology and application development methodologies to perform basic systems analysis techniques, testing, debugging, file design and storage. Understands and adheres to documentation standards, file design and storage.	part of a team under general supervision. May coach more junior technical staff.
ERP Systems Administrator	Responsible for ensuring the performance and reliability of ERP systems. Performs troubleshooting for hardware, software and system problems that involve ERP modules. Participates in projects to implement or enhance ERP systems and applications. Works with database administrator and ERP development team in defining user requirements, coordinating system-wide updates and installing upgrades and patches for ERP systems. . Participates in the design, development and implementation of test and production objects. Performs configuration, change management and testing activities as required.	**Education:** Bachelor's Degree in Computer Science, Information Systems, Business Administration, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.
Basis/Ale Technical Consultant	Responsible for providing the highest level of technical expertise and consulting on SAP Basis. Establishes the infrastructure standards and requirements. Evaluates, directs and supports SAP Basis and/or Web Application Server system enhancements and performs quality assurance functions. Researches and	**Education:** Bachelor's Degree in Computer Science, Information Systems, Business Administration, or other related field. Or equivalent work experience. **Experience:** Typically has 5 to 7 years of IT work experience, including a minimum of 2 years of experience with SAP systems.

Enterprise Resource Planning (ERP)		
Title	**Description**	**Requirements**
	implements solutions for Basis and/or Web Application Server functionality in the areas of performance monitoring and tuning and systems configuration, design and implementation. Provides highest degree of technical engineering and support to the SAP team.	**Complexity:** Works independently or as **a** part of a team under general supervision. May coach more junior technical staff.
ABAP Developer	Responsible for providing input into the design of SAP enhancements and roll outs, offering advice and thoughts providing feedback; develop quality code and its associated documentation; provide SAP support including analysis, development, testing, tracking and resolution; report writing with ABAP lists, Sapscripts and smart forms, and interfaces.	**Education:** Bachelor's Degree in Computer Science, Information Systems, Business Administration, or other related field. Or equivalent work experience. **Experience:** Typically has 5 to 7 years of SAP experience with a minimum of 5 years of SAP Workflow experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.
ABAP Workflow Developer	Responsible for the design, develop and test SAP Business Workflow process templates. Work with functional team in preparation and review of functional specifications and create technical specification and other testing documentation required during implementation life cycle and support. Assist with quality reviews. Provide production support of SAP business workflows and ABAP Development such as maintain workflow objects, maintain organization charts and role resolutions	**Education:** Bachelor's Degree in Computer Science, Information Systems, Business Administration, or other related field. Or equivalent work experience. **Experience:** Typically has 5 to 7 years of SAP experience with a minimum of 5 years of SAP Workflow experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.

Enterprise Resource Planning (ERP)		
Title	**Description**	**Requirements**
	and analyze workflow failures.	

Vendor Relationship Management		
Title	**Description**	**Requirements**
Manager, Vendor Relationships	Develops and implements the strategic sourcing and vendor relationship strategies. Manages the selection, acquisition, monitoring and contractual agreements of hardware, software, and IT services for the entire organization. Works closely with the business and IT to understand their needs and serves as the IT point of contact for all purchases, deliveries and problems with products and services. Articulates and negotiates service level agreements. Works with Asset Management to ensure appropriate use of corporate funds. Develops, or assists in the development of Request for Information (RFIs), Request for Proposal (RFPs), and business cases. Qualifies vendors and maintains an approved vendor database and tracking system. Establishes standards and procedures for evaluating products and services. Serves as the primary interface between the service provider and the business. Maintains contact with vendors to manage the status and quality of orders and the progress toward contractual commitments. Provides status updates on purchases, escalates delivery problems as necessary to affect minimal impact to the operation. Follows up with IT management to ensure satisfaction with delivered products and services and addresses any	**Education:** Bachelor's Degree in Computer Science, Information Systems, Business Administration, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of IT work experience. Requires prior management, supervisory, or team leader experience. **Breadth:** Works under general direction. Manages and mentors staff and/or more junior management staff.

Vendor Relationship Management		
Title	**Description**	**Requirements**
	problems or concerns. Participates in the budget process, such as annual budget planning, providing cash flow for other departments, quarterly reconciliation, and ad hoc expense reports. Continually seeks optimal value in service from vendors, reviewing and monitoring performance and return-on-investment metrics and initiating contract modifications. Pursues new vendor relationships as needed. Must have a basic understanding of all product and service needs, and must maintain knowledge of changing technologies.	
Manager, Outsourcing Contracts	Responsible for all activities relating to the outsourcing contract management function. Leads contract efforts from contract signing, through vendor transition and current operational state. Establishes metrics, process and procedures and oversight management model required to ensure optimum vendor delivery, service, quality and pricing. Monitors vendor contracts to ensure terms and conditions are met; defines and manages vendor penalties/incentives if performance does not meet established criteria/exceeds established criteria. Interprets the contract for the enterprise. Sets vendor directions and priorities. Creates, negotiates, and incorporates	**Education:** Bachelor's Degree in Business Administration, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of IT work experience, specifically within the IT area. Requires prior management, supervisory, or team leader experience. **Breadth:** Works under general direction. Manages and mentors staff and/or more junior management staff.

Vendor Relationship Management		
Title	**Description**	**Requirements**
	contract amendments. Renegotiates contract, if required, to accommodate scope changes or change in business requirements. Reviews vendor proposals and negotiates pricing/terms. Reviews vendor invoices for accuracy, and owns enterprise budget responsibility for the outsourcing expense. Serves as first point of negotiation for vendor disputes. Complexity of position can vary significantly depending on deal size/scope, single vs. multiple contract responsibility, and whether responsibility covers IT outsourcing contracts exclusively or all enterprise outsourcing contracts.	
Contracts Manager	Manages and controls the contractual relationship with service providers. Coordinates contract activities, including contract development, negotiation, and transition. Monitors vendor contracts to ensure terms and conditions are met. Defines and manages vendor penalties and incentives, if performance does not meet or exceed established criteria. Creates, negotiates and incorporates contract amendments, renegotiating the contract, if required, to accommodate scope changes or changes in organization requirements. Reviews contract budget variances and takes corrective action as needed.	**Education:** Bachelor's Degree in Business Administration, or other related field. Or equivalent work experience. **Experience:** Typically has 4 to 6 years of finance or contract management experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach or mentor more junior staff.
Service Manager	Provides review and direction for vendor activities, ensuring performance meets service level goals. Monitors day-to-day	**Education:** Bachelor's Degree in Business Administration, or other related field. Or equivalent work

Vendor Relationship Management		
Title	**Description**	**Requirements**
	service provider operations and performance against service level agreements, examines measured results for problem determination and root cause analysis, and takes appropriate action to correct failed activities, functions and processes. Continuously guides service activities to maintain and enhance the gains achieved through corrective actions. Sets service provider directions and priorities and prepares new service level agreement as required.	experience. **Experience:** Typically has 4 to 6 years of work experience, specifically within the IT area. **Complexity:** Works independently or as a part of a team under general supervision. May coach or mentor more junior staff.
Finance/Administration Specialist	Responsible for the financial administration practices and procedures associated with the management of vendor contracts. Reviews vendor charges, identifies disparities and resolves basic issues with the service provider. Monitors contract budget performance, identifying variances and recommending corrective actions. Allocates costs across the enterprise and performs regular audits to ensure contract compliance. Performs cost benefit analyses and supports Vendor Relationship Management team in developing the business cases necessary to gain approval for vendor-supplied services.	**Education:** Associate's or Bachelor's Degree in Business Administration, Finance or other related field. Or equivalent work experience. **Experience:** Typically has 2 to 4 years of financial management experience, preferably within the IT area. **Complexity:** Acts under consistent and direct supervision, generally following documented procedures.

Administration		
Title	**Description**	**Requirements**
Asset Manager	Responsible for managing the negotiation, procurement and lease of IT assets including systems, software, hardware and services. Works with the Manager, Vendor Relationships, project managers, project integrators and legal experts to identify and procure needed IT resources. Manages the administration of IT inventory, asset management, IT purchases and technical service contracts. Maintains and manages software license information and updates, and develops enterprise-wide IT purchasing standards and procedures. Creates and manages enterprise-wide asset management systems and serves as a liaison to finance and legal department experts. Ensures corporate and legal guidelines are followed. Responsible for the evaluation, recommendation, and implementation of asset management systems for all technical assets. Provides support to the finance department in areas of asset information and is responsible for physical inventory control. Defines requirements for asset acquisition and procedures such as management and disposal strategies for the enterprise. Responsible for budget preparation, invoice processing and purchase order preparation. Required knowledge includes extensive asset	**Education:** Bachelor's Degree in Business Administration, Finance, Accounting, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of business experience. Requires prior management, supervisory, or team leader experience. **Breadth:** Works under general direction. Manages and mentors staff and/or more junior management staff.

Administration		
Title	**Description**	**Requirements**
	management and financial management experience, as well as negotiation and legal/labor management expertise and negotiation skills.	
Asset Management Administrator	Administers IT purchase and inventory system and management system. Updates and administers asset databases, tracking life cycle of all assets. Receives and manages inventory, ensures security of assets while in inventory. Maintains and manages supplier records, service level agreements, software license information and updates, and assists in developing enterprise-wide IT purchasing standards and procedures. Receives new equipment/software requests and monitors procurement and deployment activities. Verifies financial data (e.g., leased, depreciated or expensed), and monitors and reconciles changes in inventory, and performs spot checks to ensure process and system quality.	**Education:** Associate's or Bachelor's Degree in Business Administration, Finance, Accounting, or other related field. Or equivalent work experience. **Experience:** Typically has 1 to 3 years of business experience. **Complexity:** Acts under consistent and direct supervision, generally following documented procedures and checklists.
Manager, HR/IT Staffing	Develops and implements sourcing strategies and programs to recruit and select both permanent and contracted staff for the IT organization. Viewed as the in-house consultant on recruiting and retention practices, and strategy. Manages a variety of recruiting efforts, which may include college and Internet recruitment, and use of recruitment firms. Ensures legal and corporate hiring policies are adhered to. Leads	**Education:** Bachelor's Degree in Computer Science, Information Systems, Business Administration, Human Resources, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of related experience in HR and IT. Requires prior management or supervisory experience.

Administration		
Title	**Description**	**Requirements**
	succession planning process; performs forecasting needs based on changes within the organization (e.g., retirement statistics, planned moves, reorganizations); creates and maintains a recruiting plan accordingly. Manages the recruitment process, screening process, conducts interviews for permanent and contract staff (including basic technical interviews), makes recommendations for hire, and manages the extension of offers. Has a strong understanding of the competitive marketplace (e.g., key competitors for employees, compensation pressure points, "hot" skills, and competitors' differentiators). Proactive in representing IT's issues and needs to HR leadership and is active in the HR and IT community to build awareness of the organization. Manages the relationship with contract staff vendors, negotiates contracts and pricing, and maintains records of use of contracted services. May make hiring decisions for selected positions. Viewed as critical and respected resource to IT, and an advocate of IT needs to HR.	**Breadth:** Works under general direction. Manages and mentors staff and/or more junior management staff.
Technical Recruiter	Responsible for sourcing and recruiting IT professionals for the enterprise. Works with management to define candidate qualifications. Interprets organization's recruiting strategy, identifies sources,	**Education:** Bachelor's Degree in Business Administration, Human Resources, or other related field. Or equivalent work experience.

Administration		
Title	**Description**	**Requirements**
	develops and executes recruiting plans to meet organization's technical staff needs. Utilizes multiple avenues in recruiting candidates, which may include colleges, job fairs, Internet, employee referrals, recruitment firms, etc. Identifies, screens, and interviews qualified candidates. Conducts background checks and obtains references in accordance with established procedures. Must possess working knowledge of information technology used in the enterprise and understanding of skills required for each technical position. Ability to establish strong relationships with various recruitment sources to secure a candidate pool as needed.	**Experience:** Typically has 3 to 5 years of related experience in recruiting and IT. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior staff.
HR/IT Generalist	Responsible for providing the IT organization with exclusive, full range HR functional support. This involves functions such as recruiting (including college recruiting), maintaining employee personnel records, performance management consulting on organizational/personnel issues, managing compensation and benefits, addressing issues related to employee and labor relations - including AAP and EEO matters, often assessing training needs and designing and presenting training programs. May be involved in grievance and arbitration investigation and preparation, labor contract administration, and contract	**Education:** Bachelor's Degree in Business Administration, Human Resources, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of related experience in HR and IT. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior staff.

Administration		
Title	**Description**	**Requirements**
	negotiations. Typically involves interaction with department heads, supervisors, and employees on HR related issues, including personnel policies and procedures, investigations and recommendations on employee disciplinary actions, job analysis, and organizational review. Demonstrates knowledge of the IT industry and the business, as IT is their sole customer. Assists in developing and administering enterprise-wide HR policies such as drug and alcohol policies, absence control programs, work rules, etc. Also involved in developing and maintaining employee communications programs through design of newsletters and information campaigns for the purpose of informing the organization of HR policies/issues.	
Resource Manager	Manages the coordination of human resource needs for IT projects. Develops the systems and processes to ensure that business, project and employee needs are met in the assignment of staff to projects. Responsible for developing and managing an employee skills assessment process, forecasting skill and staff needs based on project plans. Develops and manages a staff utilization process, ensuring that staff resources are fairly and evenly distributed,	**Education:** Bachelor's Degree in Computer Science, Information Systems, Business Administration, Education, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of IT work experience. Requires prior management, supervisory, or team leader

Administration		
Title	**Description**	**Requirements**
	and that staff are not over utilized across projects. Involved with IT leadership, IT Staffing Manager and Training Manager in the forecasting of staff needs and skills, to ensure proper recruitment, training and development of staff to meet current and future IT needs. Coordinates the training and development of staff to ensure scheduling of these needs. Continually communicates with both project managers and assigned staff to ensure needs of both are being met, and to continue to improve staff selection and coordination of resources. Acts as the mentor and champion of training and career development processes for assigned staff. Ensures that performance appraisals occur upon completion of projects and skills are updated. Coordinates and assimilates the performance appraisal information across projects resulting in a cohesive annual appraisal of staff who support a number of projects.	experience. **Breadth:** Works under general direction. Manages and mentors staff and/or more junior management staff.
Documentation Specialist/Technical Writer	Responsible for creation and maintenance of IT documentation. Translates technical and/or complicated information into clear, concise documents appropriate for various target audiences. Works with Development, Quality Assurance and Technical Support to produce a wide	**Education:** Bachelor's Degree in Journalism, Technical Writing, Business Administration, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of work experience.

Administration		
Title	**Description**	**Requirements**
	variety of technical publications including instructional materials, technical manuals, product documentation and the like for use by both the IT and business community. Interviews subject matter experts and technical staff to collect information, prepare written text, and coordinate layout and material organization. Researches information such as drawings, design reports, equipment, and test specifications to fill any gaps. Reviews, critiques, and edits documentation including design documents, programmer notes, system overviews, etc. Requires knowledge of company product lines and document structure. Depending on the industry/work environment, such documents may include various media, including written and video. Responsibilities include maintenance of internal documentation library, providing and/or coordinating special documentation services as required, and oversight of special projects. Must have strong organizational and project management skills and excellent writing and editing skills.	**Complexity:** Works independently or as a part of a team under general supervision. May coach more junior staff.
Manager, IT Audit	Manages multiple, concurrent IT audit engagements throughout the organization. Develops audit plans, reviews technical systems controls, identifies control weakness, and communicates significant	**Education:** Bachelor's degree in Computer Science, Information Systems, Business Administration, or other related field. Or equivalent work

Administration		
Title	**Description**	**Requirements**
	control weaknesses to senior management and provides recommendations to correct or mitigate those weaknesses. Works with senior management in developing risk mitigation strategies. Promotes compliance with all IT best practices, especially with respect to project management, systems development and information security. Provides control related consultancy to management teams and ensures the existing/new applications and/or technology infrastructure elements in compliance with enterprise security and audit standards. Develops and implements internal control policies in a wide variety of IT processes and appropriately assesses and monitors the exposure resulting from ineffective or missing practices. Supervises and conducts audits that address risks associated with poor project management, undefined business requirements, or technical design problems. Performs security reviews of technology infrastructure. Prepares audit reports to summarize audit procedures and presents audit issues and recommendations to business line management. Plans, manages, directs, and reviews the work of technical auditors and consultants.	experience. **Experience:** Typically has 7 to 10 years of IT and/or auditing work experience. Requires prior management, supervisory or team leader experience. **Breadth:** Work under general direction. Manages and mentors staff and/or more junior management staff.
IT Auditor	Responsible for planning and performing audits of information systems and related	**Education:** Bachelor's degree in Computer Science, Information

Administration		
Title	**Description**	**Requirements**
	processes in a multi-platform environment. This may include reviewing organizational IT policies, standards and procedures and providing advice on their adequacy; assisting management in the identification and assessment of technology related risks, and reporting on the adequacy of risk based controls; evaluating technology and business related controls for integrated IT and business auditing efforts. Participates in new system development and implementation reviews by reviewing project documentation, conducting interviews, assessing work completed. Ensures that development efforts are in compliance with organizational policies, standards and procedures, and controls are adequately incorporated into the systems. May be responsible for developing and implementing tools to support automated audit effort. May perform due diligence and special review(s) work as required by management.	Systems, Business Administration, or other related field. Typically requires an auditing professional designation (e.g., CISAA). **Experience:** Typically has 5 to 7 years of IT work experience, including 2 to 3 years IT auditing or equivalent experience. **Complexity:** Technical expert in the field. Coaches and mentors more junior staff. Provides input into highly complex and high impacting decision as it relates to area of expertise.

Training		
Title	**Description**	**Requirements**
Manager, Technical Training	Manages the IT training life cycle, including needs analysis, training strategy and development and delivery of training programs and tools for IT professionals and end-users. Additionally, implements and manages a skills management and competency development process for the IT professional staff and end-user community. Coordinates or provides services to identify business and subsequent training drivers for the organization and identifies technology drivers for the analysis of roles and their associated skills and competencies. Leads analysis of current skills to identify skill gaps and works with IT to prioritize skills training and development imperatives. Ensures a technical learning environment exists in the organization. Responsible for ensuring capability of technology is maximized through effective training, resulting in transfer of knowledge and skills that support organizational needs. Oversees the development of curriculums and specific courseware to address skill gaps for IT professionals and end-users, and oversees the selection and usage of various training delivery systems and certification/testing methods to assess the effectiveness and efficiency of programs. Measures training return on investment	**Education:** Bachelor's Degree in Instructional Technology, Computer Science, Information Systems, Education, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of Training (including curriculum development for IT and instructional technology) experience. Requires prior management, supervisory, or team leader experience. **Breadth:** Works under general direction. Manages and mentors staff and/or more junior management staff.

Training		
Title	**Description**	**Requirements**
	(ROI) and helps to pilot test new training techniques, strategies, tools and processes to increase training effectiveness.	
Technical Trainer	Responsible for the creation, and delivery of training and development programs to all levels of end-users and IT professionals. Involved in training needs assessment process and vendor selection. Works closely with both IT and the business to understand system and training needs for applications and packages supported. Develops documentation for custom applications and packaged applications, using a variety of mediums as needed. Designs training programs, classes, workshops, and Computer Based Training (CBT), and on-line help. Delivers training to a variety of audiences, understanding and applying adult learning principles. More junior position works on and delivers training programs for standard packages and productivity tools (e.g., Word, Excel, e-mail). More senior position delivers technical training to IT professionals, and requires in-depth knowledge and experience in the systems/applications/ programming languages supported (e.g., Oracle, NT, C++).	**Education:** Bachelor's Degree in Computer Science, Information Systems, Education, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of Training (including IT course development and delivery) experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior staff.

Security/Business Continuance		
Title	**Description**	**Requirements**
Security Manager	Manages the development and delivery of IT security standards, best practices, architecture, and systems to ensure information system security across the enterprise. Implements processes and methods for auditing and addressing non-compliance to information security standards; facilitates migration of non-compliant environments to compliant environments. Conducts studies within and outside the organization to ensure compliance with standards and currency with industry security norms. Manages and participates in the planning and implementation of security administration for all IT projects. Responsible for evaluation and selection of security applications and systems. Makes recommendations and assists in the implementation of changes to work methods and procedures to make them more effective or to strengthen security measures. In organizations where customers or vendors access databases/applications, security takes on a higher level of criticality for the protection of corporate intellectual capital.	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of IT work experience. Requires prior management, supervisory, or team leader experience. **Breadth:** Works under general direction. Manages and mentors staff and/or more junior management staff.
Security Analyst	Develops and manages security for more than one IT functional areas (e.g., data, systems, network and/or web) across the enterprise. Assists in the development and implementation of security policies and procedures (e.g., user log-on and	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience.

Security/Business Continuance		
Title	**Description**	**Requirements**
	authentication rules, security breach escalation procedures, security auditing procedures, and use of firewalls and encryption routines). Prepares status reports on security matters to develop security risk analysis scenarios and response procedures. Responsible for the tracking and monitoring of software viruses. Enforces security policies and procedures by administering and monitoring security profiles, reviews security violation reports and investigates possible security exceptions, updates, and maintains and documents security controls. Involved in the evaluation of products and/or procedures to enhance productivity and effectiveness. Provides direct support to the business and IT staff for security related issues. Educates IT and the business about security policies and consults on security issues regarding user built/managed systems. Represents the security needs of the organization by providing expertise and assistance in all IT projects with regards to security issues. Must have extensive knowledge in networking, databases, systems and/or web operations. More junior position primarily focuses on security administration; more senior position is involved in developing enterprise security strategies, management of security projects, and the most complicated security issues.	**Experience:** Typically has 4 to 6 years of IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.
Manager, Business Continuance	Responsible for the implementation and	**Education:** Bachelor's Degree in

Security/Business Continuance		
Title	**Description**	**Requirements**
	integration of risk management procedures across the enterprise, based on a thorough understanding of key IT services that must be maintained to reduce financial loss and critical customer service capability. Ensures monitoring and testing of business continuance procedures, ensures response to system failures, and is proactive in building processes to minimize/eliminate downtime. Develops service level risk management agreements with the business and with vendors.	Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of IT work experience. Requires prior management, supervisory, or team leader experience. **Breadth:** Works under general direction. Manages and mentors staff and/or more junior management staff.
Business Continuance Specialist	Develops risk management procedures, business continuance scenarios, and contingency plans for central and distributed systems and networks to maintain operations during downtime and/or major disasters. Identifies and makes recommendations regarding critical points of failure. Develops and implements policies and procedures for business continuance and test plans with various operational and support groups in IT. Involved in the evaluation and selection of vendors to ensure service levels agreement meet business continuance planning requirements.	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of IT work experience. **Breadth:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.

Product Development		
Title	**Description**	**Requirements**
Manager, Product Development	Manages research and development activities relating to the design and development of software or hardware products and qualification or re-qualification of new and existing products. Works with a cross-functional team to ensure fulfillment of product requirements, evaluates product performance, and transition products from development to commercialization. Assists in determining product delivery and deployment dates for new product releases, feature and maintenance releases, and regular corrective service or service pack releases. Acts as a technical consultant to the product organization and leads research, and prototyping of innovative technologies and products. Ensures the technology and architectural roadmap of engineering is properly aligned with and supports the product/business road map. Acts as a customer liaison on technical issues related to product integration, custom development and requirements. May lead major releases and ensure feature enhancements respond to customer requests. Responsible for product delivery managing schedules and tasks related to all aspects of product development.	**Education:** Bachelor's Degree in Computer Science, Information Systems, Engineering, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of Product Engineering and/or IT work experience. Requires prior management or supervisory experience. **Complexity:** Works under general direction. Manages and mentors staff and/or more junior management staff.
Product Architect	Chairs the product architecture team and provides technical leadership in the	**Education:** Bachelor's degree in Computer Science, Information Systems, Engineering,

Product Development		
Title	**Description**	**Requirements**
	planning, design and architect phases of software or hardware product development. Identifies, evaluates, and recommends solutions using advanced architectures and technologies to facilitate rapid development and implementation. Understands key competitors products and differentiating features. Works with a cross-functional team to translate customer requirements into detailed architectural approaches and product specifications, creates realistic development plans and schedules, evaluates and prioritizes requests for product changes and enhancements. Understands business needs as well as customer and market requirements. Applies creativity, in-depth technical and theoretical knowledge, and experience in solving highly complex architectural design problems. Recommends new technology directions or options to maintain products' competitive advantages. Communicates technology design and any related issues to technical and non-technical audiences including customers and technical partners. Prepares and documents product architecture plans. May design technical testing methods to meet target product scalability and performance objectives. Participates in the standards committees and other industry gatherings to track industry trends and maintains knowledge of	or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of Product Engineering and/or IT work experience. **Complexity:** Technical expert in area of expertise. Coaches and mentors more junior staff. Provides input into highly complex and high impacting decision as it relates to area of expertise.

Product Development		
Title	**Description**	**Requirements**
	new technologies to better serve the enterprise's architecture needs.	
Product Engineer	Responsible for all aspects of software or hardware product delivery and performance. Works with design engineering and test team to drive products from design completion to volume production release. Performs various engineering tests to verify and validate product designs, such as defining and specifying new product Design Verification Test (DVT) requirements and participation in the DVT process. Supports product evaluation and qualification on leading edge technology components. Ensures that production schedules are followed and product(s) meet specifications and quality requirements. Interacts with product engineering, quality, manufacturing, and marketing teams to analyze and provide technical support to help resolve customers' product related problems/issues.	**Education:** Bachelor's degree in Computer Science, Information Systems, Engineering or other related field. Or equivalent work experience. **Experience:** Typically has 4 to 6 years of Product Engineering and/or IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.
Product Developer	Responsible for designing and developing software or hardware product. Understands business and customer requirements that drive the analysis and design of technical solutions. Participates in all phases of product development lifecycle, including the analysis, design, test, and integration of products. Develops design specifications and parameters that are in compliance with products' architectural blueprints.	**Education:** Bachelor's degree in Computer Science, Information Systems, Engineering or other related field. Or equivalent work experience. **Experience:** Typically has 4 to 6 years of Product Engineering and/or IT work experience. **Complexity:** Works independently or as

Product Development		
Title	**Description**	**Requirements**
	Researches, evaluates and incorporates new technology and tools to enhance the product development process. Resolves customer complaints with products and responds to suggestions for improvement and enhancements. May assist in development of product user manuals.	a part of a team under general supervision. May coach more junior technical staff.

Systems and Programming Administration		
Title	**Description**	**Requirements**
Manager, Systems Software	Responsible for managing the programming, administration and support activities for the enterprise's operating systems that may reside on multiple platforms. Has a high level understanding of operating systems and foundation architecture. Accountable for operating systems software selection and development and continued maintenance of such systems to improve efficiencies. Develops departmental standards and procedures including systems programming standards and program documentation requirements. Defines and monitors multiple projects, provides technical and administrative supervision. Must interface with members of the IT and user community to coordinate activities relating to the implementation of new software. Provides technical consultation and support to users and other IT staff.	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of IT work experience. Requires prior management, supervisory, or team leader experience. **Breadth:** Works under general direction. Manages and mentors staff and/or more junior management staff.
Systems Architect	Responsible for providing senior level expertise on decisions and priorities regarding the enterprise's overall systems architecture. Facilitates the establishment and implementation of standards and guidelines that guide the design of technology solutions including architecting and implementing solutions requiring integration of multiple platforms, operating systems and applications across the enterprise. Reviews, advises and designs	**Education:** Bachelor's or Master's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of IT and business/industry work experience. **Complexity:** Technical expert in IT organization. Coaches and mentors more junior technical staff. Provides input into highly complex and high impacting decision

Systems and Programming Administration		
Title	**Description**	**Requirements**
	standard software and hardware builds, system options, risks, costs vs. benefits and impact on the enterprise business process and goals. Develops and documents the framework for integration and implementation for changes to technical standards. Assists in the development of and manages an architecture governance process. Provides technical guidance to project team areas as appropriate. Tracks industry trends and maintains knowledge of new technologies to better serve the enterprise's architecture needs.	as it relates to area of expertise.
Systems Software Programmer	Responsible for the analysis, development, modification, installation, testing and maintenance of operating systems software. Possesses a strong understanding of systems programming, graphical user interfaces and control languages. Evaluates vendor supplied software packages and makes recommendations to IT management. Modifies and/or debugs vendor-supplied utilities and packages. Modifies, installs and prepares technical documentation for system software applications. Diagnoses, isolates and de-bugs software problems and performs problem resolution. Monitors systems capacity and performance, plans and executes disaster recovery procedures and provides Tier II technical support.	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 4 to 6 years of IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.

Systems and Programming Administration		
Title	**Description**	**Requirements**
Groupware Specialist	Responsibilities include defining the business requirements for the organization's next generation of collaborative work tools, which involves working with end-users to develop specifications for the development and implementation of groupware applications (e.g., Lotus Notes, Microsoft Exchange). Based on the business requirements, responsible for the implementation, maintenance and support of groupware systems. Evaluates and recommends associated hardware/software solutions based on business requirements and user needs. Responsibilities include providing technical leadership in the design, development and promotion of selected groupware strategies. Actively involved in engineering and deploying various groupware applications such as team collaborative computing, Internet and wireless access, document sharing, and next generation messaging clients.	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 2 to 4 years of IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.
Systems Administrator	Deploys the release of new technologies as well as designs, installs, configures, maintains and performs system integration testing of PC/server operating systems, related utilities and hardware. Responsible for trouble shooting server problems as reported by users. Researches, evaluates	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of

Systems and Programming Administration		
Title	**Description**	**Requirements**
	and recommends software and hardware products. Supports web access and electronic messaging services and maintains a secure systems environment. Provides new hardware specifications to users based on application needs and anticipated growth, installs new servers and maintains the server infrastructure.	IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.
Systems Security Specialist	Develops, evaluates and manages systems security across the enterprise. Areas of concentration include account management, password auditing, network based and web application based vulnerability scanning, virus management, and intrusion detection. Requires technical expertise in systems administration and security tools, combined with the knowledge of security practices and procedures. Assists in the development and implementation of security policies and procedures (e.g., user log-on and authentication rules, security breach escalation procedures, security auditing procedures, and use of firewalls and encryption routines). Prepares status reports on security matters to develop security risk analysis scenarios and response procedures. Enforces security policies and procedures by administering and monitoring security profiles, reviews security violation reports	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 2 to 5 years of combined IT and security work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.

Systems and Programming Administration		
Title	**Description**	**Requirements**
	and investigates possible security exceptions, updates, and maintains and documents security controls. Involved in the evaluation of products and/or procedures to enhance productivity and effectiveness. Provides direct support to the business and IT staff for systems security related issues. Educates users on systems security standards and procedures. Must have broad technical knowledge of network operating systems (e.g., Unix, NT).	

Business Analysis and Planning		
Title	**Description**	**Requirements**
Manager, IT Business Planning	Assists the IT organization in defining and implementing its business plan and goals to support the strategy and goals of the organization. Responsible for working with IT and business leaders to create the business plan for IT. Assists in the cascading of plans to the various IT divisions/departments. Scans the external IT environment to provide a common set of planning assumptions, competitive analysis, current and future market assessments for products and services to the business, and a common set of planning processes and tools to assist those with planning responsibility in IT. Assists IT and business leadership in actualizing the business plans within their own area of responsibility, working with them to ensure that technical and resource decisions link to the overall IT plan. Works closely with the enterprise's business planning leaders to ensure alignment. Responsible for ensuring that business planning and purpose is considered in all key IT decisions, and therefore must be involved in the discussion and decision making process for technology, business, and human resource investments on an on-going basis. Works with Finance and Human Resources to represent IT's needs and understand the cost and human	**Education:** Bachelor's Degree in Computer Science, Information Systems, Business Administration, Finance, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of IT and business work experience. Requires prior management or supervisory experience. **Breadth:** Works under general direction of senior IT leadership. Manages, coaches and mentors staff (some organizations will not be large enough to warrant Business Planning staff).

Business Analysis and Planning		
Title	**Description**	**Requirements**
	resources impact of those needs in creating, implementing, and adjusting business plans. This position typically reports to the CIO. Ensures alignment of the IT strategy to the business strategy. Responsible for ensuring integration of all work performed across all business units. Responsible for educating senior business leaders on the IT strategy as well as educating senior IT leadership on the direction of the business. High degree of business complexity and impact to overall success of IT in meeting business needs.	
Business Process Consultant	Facilitates the optimization of business unit performance by enhancing the alignment between business processes and information technology. Responsible for actively resolving day-to-day technology needs of the business unit with a focus on the analysis of processes - dissecting problems and suggesting solutions. Includes complex systems process analysis, design and simulation. Must understand technical problems and solutions in relation to current, as well as future, business environment. Must be able to suggest plans to integrate new and existing processes. Provides input and supports planning and prioritization for business process engineering related activities, including developing the business	**Education:** Bachelor's or Master's Degree in Computer Science, Information Systems, Business Administration, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of IT and business/industry work experience. **Complexity:** Works under general direction. Performs highly complex analysis and provides recommendations that impact business results.

Business Analysis and Planning		
Title	**Description**	**Requirements**
	unit process engineering plan and integrating that plan with the corporate plan. Possesses knowledge and experience leveraging both IT solutions and business process improvements. Participates in continuous review and update to ensure that processes meet changing business unit conditions. Identifies processes for improvement, documents existing processes, identifies and analyzes gaps between current processes and the desired state, designs new processes, develops process performance measures and plans the transition to a new process. Provides counsel and leadership on future use of technology and business process improvements. This requires a high level of understanding of the organizations business systems and processes as well as industry-wide requirements. Must demonstrate expertise in strategic planning, tactical execution, project management, process management, and business systems requirements definition.	
Business Analyst	Serves as a liaison between the business community and the IT organization in order to provide technical solutions to meet user needs. Possesses expertise in the business unit(s) they support, as well as, an understanding of the IT organization's systems and capabilities. Analyzes	**Education:** Bachelor's Degree in Computer Science, Information Systems, Business Administration, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of

Business Analysis and Planning		
Title	**Description**	**Requirements**
	business partner's operations to understand their strengths and weaknesses to determine opportunities to automate processes and functions. Assists in the business process redesign and documentation as needed for new technology. Translates high level business requirements into functional specifications for the IT organization and manages changes to such specifications. Educates the IT organization on the direction of the business. Negotiates agreements and commitments by facilitating communication between business unit(s) and IT from initial requirements to final implementation. Possesses an understanding of technological trends and uses this knowledge to bring solutions to business units supported to enhance the enterprise's competitive edge. May make recommendations for buy vs. build decision.	IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.
IT Business Consultant	Works with business leaders and acts as a liaison between IT and business units (typically leadership for assigned business units) or vendors. Viewed as integral to the business in any decisions that may be impacted by technology. Responsible for the collection, analysis, review, documentation, and communication of business needs and requirements to IT organization. Leads the gathering of business needs as well as the design of	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of IT and business/industry work experience. **Complexity:** Works under general direction. May manage project work of business analysts. Manages and

Business Analysis and Planning		
Title	**Description**	**Requirements**
	solutions through direct interaction with business units leaders. Focuses on developing and improving business processes at all times, assisting with the development of metrics, both within the technology and business organizations. Has a strong understanding of information systems, business processes, the key drivers and measures of success for the business, and the short and long-term direction of the business and technology. Identifies, proposes and influences business solutions, negotiates deliverables and requirements across multiple business customers or organizations. Ensures that the design and integration of proposed system, software and hardware solutions leads to the development and growth of the business through effective use of technology. Integrally involved in 'buy vs. build' decisions.	balances needs of diverse customers and the IT organization.
Enterprise Architect	Provides overall direction, guidance and definition of an enterprise's architecture to effectively support the Corporate Business Strategy. Responsibilities include researching, analyzing, designing, proposing, and delivering solutions that are appropriate for the business and technology strategies. Must have significant business knowledge and have one or more areas of technical expertise in which they concentrate. Interfaces across several	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of IT work experience in multiple IT areas and 2 to 3 years of relevant architecture experience. **Complexity:** Technical expert in IT

Business Analysis and Planning		
Title	**Description**	**Requirements**
	business areas, acting as visionary to proactively assist in defining the direction for future projects. Responsible for conception of solutions, building consensus and the selling and execution of such solutions.	organization. Works on highly complex projects that require in-depth knowledge across multiple technical areas and business segments.
Manager, Customer Relations	Overall responsibility for establishing, managing and maintaining strategic relationships with external customers in one or more business segments. Regularly interacts with functional groups within the IT organization to communicate and clarify customer requirements. Performs as liaison between enterprise and end-users, outside vendors, contractors, and consultants to define and establish service and support requirements. Investigates and resolves customer relationship problems. May participate in contract negotiation and administration. Analyzes and determines operational and financial impact of new product and service offerings. Proposes changes or solutions to products and services for optimal business results. Assists in organization change management and functions as an internal consultant in analyzing business processes, assessing and defining customer specifications and requirements, proposing business solutions that prioritizes technology and services needs to satisfy	**Education:** Bachelor's degree in Computer Science, Information Systems, Business Administration, Marketing, or other related field. **Experience:** Typically has 7 to 10 years of IT and business work experience. Requires prior management or supervisory experience. **Breadth:** Works under general direction. Manages and mentors staff and/or more junior management staff.

Business Analysis and Planning		
Title	**Description**	**Requirements**
	customer requirements, and facilitating solution design, building and testing.	

Release Management		
Title	**Description**	**Requirements**
Configuration Management Analyst	Provides Configuration Management (CM) support for the customer's software baseline control efforts. Maintains the baseline using automated CM tools. Responsible for maintaining project software and documentation inventory and configuration baselines. Establishes and maintains the CM processes and procedures. Defines and implements procedures for releasing products throughout the whole product life cycle. Serves on the Configuration Control Board (CCB). Produces builds of products for use in testing and in production; identifies and implements processes to strengthen, streamline and automate build processes; serves as an advocate for best practices; drives the development and maintenance of build automation tools; maintains the source code change control; performs distribution partner and corporate client set-ups. Performs software deficiency and change request updates and reporting. Maintains the project notebook library and software development folders. Tracks and maintains the project Change Requests, Impact Assessments, Incident Reports, and Software Change Notices on a continuous basis. Measures and reports on success metrics benchmarking performance against	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.

Release Management		
Title	**Description**	**Requirements**
	world class measures. Supports management with technical performance data from the CM process.	
Release/Build Engineer	Develops and maintains the build environment, the source code control system and the issue tracking systems. Creates and tests builds, resolves issues, applies labels to file and communicates build status. Responsible for building scripts and installation procedures. Proactively identifies and implements procedures to streamline the build process which may drive the development and maintenance of an automated build process with automatic notification of build and unit test failure problems to responsible engineers. May assist engineering management in making choices for source code management systems, and other development and testing tools. Knowledge of quality methods and procedures as well as PC, PVCS, Unix and scripting languages is required for successful performance in this role.	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of IT work experience. **Complexity:** Works independently or as a part of a team under general supervision. May coach more junior technical staff.

Program Management		
Title	**Description**	**Requirements**
Program Manager	Responsible for managing the overall IT project portfolio. Develops the program strategy, supporting business case, and various enterprise-wide high-level project plans. Ensures integration of projects and adjusts project scope, timing, and budgets as needed, based on the needs of the business. Communicates with IT leadership, business leadership and IT Business Consultants to communicate program strategy, direction, and changes. Responsible for delivering all projects contained in the IT project portfolio on time, within budget and meeting the strategic and business requirements. Responsible for tracking key project milestones and recommending adjustments to Project Managers. Partners with senior leadership of the business community to identify and prioritize opportunities for utilizing IT to achieve the goals of the enterprise. Must possess extensive knowledge and expertise in the use of Project Management methodologies and tools.	**Education:** Bachelor's or Master's Degree in Computer Science, Business Administration, or other related field. Project Management certificate may be required. Or equivalent work experience. **Experience:** Typically has 10 to 15 years of IT and business/industry work experience, with at least 3 years of experience in a leadership role and 5 years managing projects. **Breadth:** Overall responsibility for department decisions and management. Coaches and mentors more junior management staff.
Project Manager	Responsible for overall coordination, status reporting and stability of complex and cross-functional project oriented work efforts. Manages multiple projects simultaneously. Establishes and implements project management processes and methodologies for the IT community to ensure projects are delivered on time, within budget, adhere to high quality	**Education:** Bachelor's Degree in Computer Science, Information Systems, Business Administration, or other related field. Project Management certificate may be required. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of IT work experience, including 4 or

Program Management		
Title	**Description**	**Requirements**
	standards and meet customer expectations. Responsible for tracking key project milestones and adjusting project plans and/or resources to meet the needs of customers. Partners with senior management of the business community to identify and prioritize opportunities for utilizing IT to achieve the goals of the enterprise. Must possess extensive knowledge and expertise in the use of Project Management methodologies and tools and understand human resources policies and practices and change management techniques.	more years managing projects. Requires prior management, supervisory, or team leader experience. **Breadth:** Works under general direction. Manages and mentors staff or more junior management staff.
Project Leader	Manages the execution of day-to-day project oriented work efforts and meeting customer expectations for contracted time, cost and specifications definitions. Responsible for assembling project plans and teamwork assignments, directing and monitoring work efforts on a daily basis, identifying resource needs, performing quality review; and escalating functional, quality, timeline issues appropriately. Must possess technical proficiency sufficient to effectively perform these activities. Operationalizes technical and managerial processes and supervises the development and maintenance of business support systems. Coordinates communication with all areas of the enterprise that impacts the scope, budget, risk, and resources of the work effort being managed. Requires	**Education:** Bachelor's Degree in Computer Science, Information Systems, Business Administration, or other related field. Or equivalent work experience. **Experience:** Typically has 3 to 5 years of IT work experience, including 2 or more years managing projects. **Complexity:** Leads, assigns, and tracks results for a project team, with general supervision.

Program Management		
Title	**Description**	**Requirements**
	extensive understanding of project management principles and methodology. Also understands human resources policies and practices and change management techniques, and assists in the performance management process for staff assigned to projects. More senior role handles responsibilities for larger scaled projects, with greater impact to the enterprise.	

Customer Service Hotline		
Title	**Description**	**Requirements**
Manager, Customer Service Hotline	Directs the Customer Service's hotline and order processing services for an enterprise. Responsible for business strategy and planning to ensure the organization has the appropriate resources, budget, tools and customer satisfaction metrics needed to provide the highest level of customer service. Establishes quality standards and performance metrics for customer service's hotline performance. Manages the design and implementation of knowledge based systems, ensures appropriate resources are available to respond to customer inquiries/issues, develops and implements learning strategy to maintain knowledge and provide growth for representatives and resolves complex customer issues.	**Education:** Bachelor's Degree in Computer Science, Information Systems, Business Administration, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of related work experience. Requires prior management, supervisory, or team leader experience. **Breadth:** Works under general direction. Manages and mentors staff and/or more junior management staff.
Customer Service Hotline Representative	Responsible for responding to inquiries and providing information to customers calling into a service hotline. Records all customer contact information in a call log. Evaluates situation, determines appropriate response and escalates to designated specialist/resource for resolution of customer's problem or complaint. Tracks issues escalated for resolution to ensure customer receives a timely response. Must have knowledge of the enterprise's business/products and demonstrate strong customer focus skills.	**Education:** Associate's or Bachelor's Degree or technical institute degree/certificate in Computer Science, Information Systems, Business Administration, or other related field. Or equivalent work experience. **Experience:** Typically has 0 to 2 years of related work experience. **Complexity:** Acts under consistent and direct supervision, generally following documented procedures and checklists.

Customer Service Hotline		
Title	**Description**	**Requirements**

Technical Product Support		
Title	**Description**	**Requirements**
Manager, Technical Product Support	Develops business strategy and provides direction for technical product support function. Manages a team responsible for resolving customer technical problems with enterprise's products, developing the technical related responses for Requests for Quotes (RFQs), working with sales team to address technical product issues, and delivering and installing new software releases to customers, and providing post-sales technical product support to customers. Responsible for managing the technical interface to customers, including RFQ specification reviews, hands-on testing and modeling and interfacing with development and engineering for systems design work at customer sites. Responsible for building and maintaining relationships that can be leveraged to support the achievement of business objectives.	**Education:** Bachelor's Degree in Computer Science, Information Systems, Business Administration, or other related field. Or equivalent work experience. **Experience:** Typically has 7 to 10 years of related work experience. **Breadth:** Works under general direction. Manages and mentors staff or more junior management staff.
Technical Product Support Analyst	Responsible for providing post-sales technical product support. This includes, but is not limited to, analyzing customers' business needs and developing technical requirements, preparing technical responses to Requests for Quotes (RFQs), configuring integrated solutions to meet customer needs and implementing client solutions. May act as a primary point of contact between customer's technical staff	**Education:** Bachelor's Degree in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 4 to 6 years of work experience. **Complexity:** Works independently or as part of a team under general supervision.

Technical Product Support		
Title	**Description**	**Requirements**
	and the enterprise's development/engineering organization. Serves as technical consultant to the sales team and must have a broad knowledge of multiple computer environments, platforms and technologies and in-depth knowledge of the enterprise's products.	Resolves technical problems/issues of complex to highly complex in nature.
Technical Product Support Specialist	Responsible for providing post-sales technical product support. This includes, but is not limited to coordinating the resolution of customer problems, maintaining and installing applications/solutions, performing bug verification, release testing and beta support for one or more products. May work at the customer site to design and install applications. Must have knowledge of one or more of the enterprise's products and familiarity of multiple applications.	**Education:** Associate's or Bachelor's Degree or technical institute degree/certificate in Computer Science, Information Systems, or other related field. Or equivalent work experience. **Experience:** Typically has 1 to 2 years related work experience. **Complexity:** Acts under consistent and direct supervision, generally following documented procedures and checklists.