GENERAL STATEMENT OF DUTIES: Assists the Information Systems Assistant Manager in charge of Networks to plan, organize, direct, and coordinate assigned aspects of information services and technology. This technology supports the functions required by New Castle County Government through understanding and anticipating the business and customer requirements and by translating those requirements into appropriate solutions through the application of information services and technology; does related work as required. Serves as high-level support to other administrators, engineers, and network group members; develops future re-designs of architecture, infrastructure and network applications for current and future projects within the Information Systems section; develops and maintains relationships with vendors for ongoing support; does related work as required.

DISTINGUISHING FEATURES OF THE CLASS: An employee in this class performs advanced network design and provides network support. This employee serves as a catalyst for continuous improvement in Information Services network infrastructure for all county departments. Duties include processing implementation and design, installation coordination and systems monitoring, assists in systems design, programming, computer operations, and technical support. Significant responsibilities include participation in the development, evaluation, and support of business processes used to accomplish the objectives of New Castle County; assistance in the planning, design, development, and documentation of an ongoing comprehensive technology strategy.

EXAMPLES OF WORK: (Illustrative only)
- Designs, engineers, and manages WAN Routing and Network Infrastructure(s) for multiple network segments over TLS (Layer 2 & 3) Frame-relay, ATM, and Point-to-Point. Skills require VLAN/access lists and routing protocols skills;
- Designs, engineers, and manages multi-clustered VMWare Enterprise Virtual Infrastructure 3.x for approximately 100 servers. Skills require managing with DRS Vmotion, resource allocation storage Vmotion. Disaster recovery planning and implementation experience required;
- Designs, engineers, and maintains a distributed corporate Firewall(s) and Application Intelligence solution(s) for aggregating and securing disparate networks (County, State and ISP) emphasizing CJIS and FIPSII compliance in a distributed environment;
- Windows 2003 Active Directory designing and implementation for corporate network emphasizing security, replication, group policy design and administration. LDAP integration with disparate applications (PeopleSoft, Web security etc.);
- Storage Engineer of EMC Storage Area Networking (SAN Arrays and Centera solutions) over Fiber Channel storage solutions for file, database and document management solutions. Capacity planning, replication and monitoring are essential;
- Designs, engineers, and manages Disaster Recovery solution for utilizing remote replication to County DR site (EMC RecoverPoint);
NEW CASTLE COUNTY GOVERNMENT

CLASS SPECIFICATION

Title: SENIOR NETWORK ENGINEER

- Designs and maintains corporate VPN technologies for secure communications over disparate networks;
- Designs and implements highly-available Windows 2003 MS Clustering solution(s) for SQL applications and file storage environments. DFS through clustering and record management systems required (RMS);
- Implements and manages MS Clustered Microsoft Exchange 2003 environment;
- Designs, engineers, and manages Multi LAN(s) environment for the all County locations (designed for high availability and fault tolerant paths) with emphasis on VLAN connectivity and familiarity with LACP design;
- Oversees network security auditing and security checks to ensure highly secure network environment working with third-party for testing and assessments;
- Designs, engineers, and maintains network solutions for BIND, DNS, DHCP, traffic-shaping MS Active Directory service, LDAP, HTTP Filtering, SMTP (high-availability and fault tolerant);
- Serves as backup to UNIX administration with working knowledge of file system management, capacity planning and access administration;
- Develops and maintains Corporate Citrix Presentation Server farm for County/State remote services;
- Engineers and implements Corporate Anti-Virus Solution and corporate Anti-Spam solution.

REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES: Thorough knowledge of appropriate aspects of information systems analysis, design, construction, integration, operation, security, and maintenance; good knowledge of the principles and practices of project management, vendor relationships, and assisting in process innovation and redesign; thorough knowledge of access management (multi- VSAN, ITL, and ISL); thorough knowledge of NetMotion Mobility XE with implementation experience for CJIS and FIPSII compliance; thorough knowledge of security protocols, heuristics, and monitoring tools, split-zoning required for multi ISP connections, UNIX file system management, UNIX file system capacity planning, UNIX file system access administration, SANTap (AUT, CVT, and VI), web front end, and DMZ access; some knowledge of CheckPoint, Juniper (Junos) Cisco, Enterprise Management (ESM) and multi-site clustering; ability to organize, plan, and direct a variety of complex technical operations; ability to establish and maintain effective working relationships with associates, other governmental agencies, private organizations, the general public, and customers and to promote an ongoing attitude of dedication to overall exceptional customer service; ability to work with managers to identify business opportunities and to achieve success through effective employment of technology; ability to communicate courteously and effectively, both verbally and in writing.
MINIMUM QUALIFICATIONS: At least five (5) years of Enterprise level network management experience in applying information technology to meet the needs of a medium to large government or business enterprise network design, management and possession of a Bachelor's Degree from an accredited college or university with major course work in information systems or related field; or an equivalent combination of education, experience or training directly related to the required knowledge, skills, and abilities.

ADDITIONAL REQUIREMENTS: Ability to pass a Class III County physical examination and background check; possession of a valid Delaware Class D driver's license or its equivalent.

PREFERRED REQUIREMENTS: Five (5) years of relevant information technology experience and possession of the following certifications, education or combination of skills to manage the following systems and equipment: Cisco, 3Com and Juniper routers and multi-layer switches (Core and LAN routing), Fiber and Ethernet technologies. This includes fiber SAN fabric switches, Dell, HP and Compaq enterprise level servers, 3Com wireless LAN controllers and managed access points, 8E6 Web Filtering and Reporting Appliances, Microsoft Windows XP, Server 2000, 2003 Server (Standard and Enterprise), LINUX (RedHat and Fedora Core versions), VMWare Virtual Center Server 2.x / ESX 3.5 Server, Cisco IOS, Juniper Junos, EMC SAN management, RecoverPoint system management.

HISTORY OF REVISIONS:
Established: 02/23/10