INFORMATION SYSTEMS SPECIALIST 2

Nature of Work

Under general supervision, performs full-performance level work in selecting, installing, implementing and maintaining multiple platforms and multiple applications, in particular that associated with Local Area Network/Wide Area Networks, mid-range systems and/or large systems. Depending upon the assignment, may function as a resource for software support and/or develop a computer literacy curriculum and training for a large agency or multiple agencies. Troubleshoots problems which occur in various networked micro, mini and mainframe computer systems. Trains users on proper procedures and usage of computer hardware and software and/or assists in development of customized user training. Evaluates and recommends software and upgrades. May specialize in an area of technical expertise such as networking technologies, data communications, hardware support, software support, training or information technology forensic examinations and conducting investigations of computerized accounting or other computerized records systems. Performs related work as required.

Distinguishing Characteristics

This position requires advanced training or experience in a technical specialty. The Information Systems Specialist 2 is primarily assigned to installations involving complex communication needs or integrated solutions involving multiple applications and multiple platforms. Tasks may include hardware and software selection, implementation planning and installation, training one-on-one and in a classroom environment, and providing on-going support. Incumbents work in projects involving complex connectivity between departments, multiple locations and multiple platforms. May include full-performance information technology forensic examinations of computer hardware, software or records systems.

Examples of Work

Supports end-users via telephone and/or site visit regarding system problems such as access and/or security, printer access and operations (through LAN, mid-range computer or IS&C system control units), server based and PC standalone applications, and/or general system(s) problems on LAN, mid-range system, and/or access to other systems (for example IS&C's mainframe, federal systems), internet access, private time-sharing computer services, or external dial-up/dial-in access to various systems.

INFORMATION SYSTEMS SPECIALIST 2 (CONT'D)

Examples of Work (cont'd)

   Uses diagnostic and/or monitoring software to identify
      problems and takes appropriate corrective action, either by
      repairing unit or contacting appropriate vendor.
   Participates in the review and/or production of automation
      plans; information technology and networking requests for
      hardware/software; hardware/software; reviews needs
      analysis and determines applications which could streamline
      the process; may meet with users to clarify work flow or
      procedures; researches alternative hardware/software which
      could further enhance the system; reports to superiors any
      problems with recommended course of action.
   Plans, conducts or assists in group and one-on-one training of
      computer applications and operations software and proper
      use of hardware.
   Develops training modules and instructional materials.
   Reviews and evaluates vendor training packages to determine
      benefit to the training system and provides technical
      support in its use.
   Coordinates with users, management and vendors the local and
      remote installation of personal computers, local area
      networks, terminals, printers, communication controllers
      and other information processing equipment, including
      identifying requirements and coordinating other associated
      activities such as data cabling and electrical upgrades.
   Trains co-workers on networking setup and operations and
      develops and maintains current LAN documentation.
   Maintains current knowledge level by researching technical
      literature and attending classes/seminars, contact
      technical staff in other state, federal and private
      agencies for information; may write or supply users with
      information to complete requisition requests or
      specifications.
   Tests new hardware or software supplied by vendors to
      determine the scope of capabilities, accuracy of functions,
      and level of user literacy required to operate the system;
      writes documentation on hardware and software which have
      been tested in-house.
   Serves as a forensic examiner responsible for planning,
      coordinating and directing forensic activities; inventories
      and examines computer-related evidence such as magnetic
      media storage devices, floppy/hard disks, optical disks,
      memory cards and magnetic strip cards.

INFORMATION SYSTEMS SPECIALIST 2 (CONT'D)

Examples of Work (cont'd)
Provides technical guidance and assistance to investigators to prevent data and equipment damage.
Trains federal, state and local law enforcement personnel on computer examination/investigation techniques.
May be required to testify in court on the procedures and methods used to obtain data.

Knowledge, Skills and Abilities
Knowledge of capabilities and limitations of computers and related devices.
Knowledge of local area and wide area networking, information processing and communications concepts and standards.
Knowledge of the operations of LAN management software and/or operating systems software, application software and PC tools.
Knowledge of PC, mini and mainframe operating systems.
Knowledge of computer hardware, software and its terminology.
Knowledge of proper methods of evidence handling and storage.
Ability to analyze and evaluate work environments, computer systems, user requirements and information processes.
Ability to evaluate complex information systems and understand their structure, component parts and inter-relations.
Ability to clearly report activities and identify potential problem areas to manager.
Ability to communicate clearly, both orally and in writing.
Ability to analyze information problems and apply technical information solutions.
Ability to compile information and interpret technical information in user friendly formats.
Ability to perform computer forensic examinations.
Ability to duplicate and preserve digital evidence.

Minimum Qualifications
Training: Bachelor's degree from an accredited college or university.
Substitution: Three years of full-time or equivalent part-time paid personal computer or server support experience may be substituted for the required training. Successful completion of twelve credit hours or the equivalent thereof of industry recognized authorized/certified LAN administration, network service/support and/or network technologies training may substitute for one year of the required training.

INFORMATION SYSTEMS SPECIALIST 2 (CONT'D)

Minimum Qualifications (cont'd)
    Experience: Three years of full-time or equivalent part-time paid experience in information processing field, one year of which is experience in local area network administration support and/or networking of standalone, mainframe, minicomputer, and LAN connected microcomputers and two years of which is experience in installation of hardware and software, support and/or training.
    Substitution: Twelve hours of computer science or data processing may substitute for one year of information processing experience excluding PC and LAN administration support.

FOR FORENSIC IT SPECIALIST POSITIONS
Training: Bachelor's degree from an accredited four-year college or university with at least 20 semester hours in computer science, information technology, information systems analysis, information management, mathematics, computer engineering, electrical/electronic engineering or other directly related field.
Substitution: Bachelor's degree from an accredited four-year college or university and two years full-time or equivalent part-time paid law enforcement investigative experience involving the recovery of evidence from computers or other storage media may be substituted for the 20 semester hours in the specific disciplines.
Experience: Three years of full-time or equivalent part-time paid experience in information technology forensic investigations or in computer systems analysis of accounting/auditing systems.
Substitution: Possession of one of the following certifications may substitute for the experience: A+ Certification Personal Computer Hardware Course; Network+ Certification; FBI Computer Analysis Response Team (CART) Field Examiner Certification Course; or basic computer forensic training from a recognized training facility.