Job Title: Senior Network Engineer Date: September 2017

Supervisor's Title: Director of Engineering FLSA: Exempt

Clearance: CBP BI SCA: N/A

Contract: All Location: Sierra Vista, AZ

#### **RESPONSIBILITIES**

The Senior Network Engineer reports to the Director of Engineering. Participates in design, implementation, testing, and troubleshooting of information technology (IT) systems as part of both the systems design team and the engineering installation deployment team. Additionally, the position participates in the system administration, analysis and configuration of customer systems as well as support of the office IT environment.

# **IT and Network Management**

- Tests, installs, and repairs computer images and provided software of supported customer devices
- Performs software update installation, planning and management to prevent and mitigate security vulnerabilities
- Ensures compliance with vendor recommended software patches and coordination with vendors for compliancy to customer requirements
- Conducts analysis and response to customer provided System Security Operations Center Scans
- · Performs identification and removal of verification failures or malicious software
- Conducts analysis and identification of Mean Time to Failure (MTF) anomalies, system malfunctions, system trends
- Reviews OS log Files, Anti-virus logs, software logs to determine root case of system malfunctions and failures
- Writes IT technical documentation for installation instructions
- Installs, sets up and troubleshoots all internal and external Operating System (OS) configurations such as system hardware driver software, network card configuration, computer name and Network ID
- Installs, sets up and troubleshoots to resolution computer hardware issues
- Conducts configurations of computers to associate with a network such as IP address, Gateways, Subnets, DNS settings and Join Active Directory
- Conducts configuration management of all computer systems and hardware configurations as well as the accompanying installation documentation
- · Completes preparation of head-end components for installation prior to deployment and while on site
- Performs Internet Protocol (IP) camera integration, testing, coordination with camera vendors to mitigate potential and discovered security anomalies
- · Performs Contingency Plan drafting, editing, management, and testing for customer systems
- Develops Continuity of Operations Plans (COOP) and testing for customer systems
- Performs Bandwidth Analysis of customer sites for existing system functionality and optimization as well as for installation planning
- Provides drawings and technical summaries to customer Network Architecture and Engineering (NAE) for system additions, and existing system optimization
- Participates in design reviews, construction coordination and onsite inspections on behalf of the customer to ensure compliance to customer standards and overall functionality
- Participates in all Security Accreditation (SA) document updates and submittals
- Coordinates with the customer ISSO for remediation planning, system engineering and resolution to ongoing issues
- Performs oversight of local maintenance, repair, and configuration of office IT components
- Manages assigned personnel

## **New Technology Implementation Testing and Documentation**

- Identifies and Tests New Technologies as directed
- Performs Technology Research
- Prepares systems for security vulnerability scanning
- Performs resolution and response to security vulnerability incidents
- Coordinates with original equipment manufacturers (OEM) and vendors to arrange demo equipment to answer technology questions and conduct analysis to answer vulnerability responses
- Completes actions for system additions and operating approvals to include Technology Insertions (TI), Authority to Operate (ATO) and SA

# **Configuration Management**

- Tracks and maintains lists of all installed software version(s)
- Tracks and maintains detailed lists of all managed network devices (system names, IP configurations, locations, etc.)
- Coordinates with Maintenance for tracking of hardware and software upgrades
- Manages user profiles in Active Directory
- Manages computer objects in Active Directory

## **Project Design**

- Plans, analyzes, designs, implements, tests, and troubleshoots systems
- Provides systems engineering support, technical expertise and support direct interaction with customers
- Conducts site surveys of customer sites and plans and designs IT system implementations
- Monitors the development and deployment of national systems and provides installation technical support
- Assesses current systems designs and makes recommendations to improve performance
- Maintains a broad knowledge of state-of-the-art technology, equipment, and/or relevant systems
- Recommends solutions to installation and customer delivery problems
- The IT Engineer may lead working groups and must be able to perform independently and within groups
- Coordinates and conducts site surveys and technical implementation of systems with the company and customer contacts.
- Produces cost models, bills of materials (BOM) and field documentation as required
- Directs IT tasks associated with layout and design of electrical circuitry, surveillance systems, access control systems, and intrusion detection systems for internal and external use to ensure conformance with Statements of work, proposals, codes and safety regulations
- Participates in Bid and Proposal system design, technical writing, and other assigned efforts
- Participates in the development of installation and system standards as well as quality assurance and control of existing codes and developed standards
- Reads, interprets, and creates detailed schematics, wire diagrams and site plans for IT systems
- May direct and coordinate installation, operation, maintenance, and repair of equipment and systems in field installations to include performing the installation when required.
- Other duties, as assigned.

### **QUALIFICATIONS**

#### **EXPERIENCE:**

- Bachelor's degree in Information Technology, Computer Science or related degree program from an accredited institution; 6 years of technical experience may be substituted for the degree
- Master's Degree in Information Technology or associated discipline preferred
- Additionally, at least 5 years of broad technical experience to includes networks, computer systems, electronics, or communication systems
- Additional Technology Systems/Components Certifications desired. (Network+, Security+, PSP, ITIL, and/or CISSP)
- Network Infrastructure and Configuration knowledge desired.

- Must have experience with Active Directory, computer hardware, computer imaging, and remotely administrating computer systems
- Hands on experience with Microsoft Office and Windows Platform
- Experience with IP camera design and installation preferred.
- Visio, AutoCAD, Technical Writing, and Site Design strongly desired.
- Familiarity with various test instruments, Network Analyzer, Spectrum Analyzer, OTDR, etc.
- Field experience desired.
- Supervisory experience preferred
- Valid driver's license; able to meet company safe driving requirements.

#### ABILITIES REQUIRED:

- Able to travel for site surveys and installation support (up to 50%)
- Ability to interact with all levels of the organization and with customers.
- Ability to communicate effectively utilizing both verbal and written communication to convey complex technical solutions in a easy to understand and actionable manner
- Strong detail-oriented skills; able to multi-task and change priorities quickly.
- A self-starter who is able to work well without direct supervision.
- Must be able to obtain and maintain related security clearances
- Able to secure a valid passport

#### SPECIAL PHYSICAL REQUIREMENTS:

- Ability to work designated schedule, as well as maintain attendance and punctuality.
- Able to work at moderately high heights, up to 40 feet above the ground using bucket trucks, scissor lifts, and ladders
- Able to work in outdoor environment exposed to varying high or low temperatures
- Must have sufficient physical agility to walk, climb, stand, crawl, and stretch on a continual basis
- Must be able to perform work utilizing small hand tools and power tools as required
- Able to lift a minimum of 60 lbs
- Able to sit at computer for 6-8 hours a day
- Able to manipulate small objects and grip without shaking
- Able to use computer, keyboard, mouse, and printers
- Must be able to travel in airplanes to and from destinations on a regular basis
- Must be able to identify colors for cable identification and installation purposes

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