

**Job Title:** VOIP Network Engineer  
**Department:** Technology & Media  
**Reports To:** Network & Security Manager  
**FLSA Status:** Exempt  
**Salary Schedule:** EC lane 04



## **SUMMARY**

The VOIP Network Engineer's role is to design, implement, optimize, and ultimately ensure the stable operation and integrity of the District's IP Voice services. The Engineer provides backup support for all WCSD wireless systems.

**ESSENTIAL DUTIES AND RESPONSIBILITIES** *may include the following. Regular, reliable worksite attendance and timeliness is an essential job function to perform the essential duties and responsibilities of the position. While this job description attempts to outline all essential duties of the position, the description is not a contract and the job functions are subject to change at the organization's discretion. Other duties may be assigned.*

Engineers and designs of new VOIP systems as well as build-out of existing infrastructure. Understands when and where standards can and cannot be used and why design deviations would be used or recommended for a network design.

Designs and validates voice link performance, quality, and reliability.

Optimizes VOIP systems through packet capture, packet analysis and by using network troubleshooting tools to identify packet loss, jitter, and latency.

Manages all VOIP network hardware and equipment, including IP phones, VOIP Switches, VOIP Servers, VOIP Intercoms and other supporting hardware.

Provides backup support for District wireless systems. Works closely with the Wireless Network Engineer. Assists in wireless projects, deployments, designs, and installations.

Collaborates with district administrators to assess short and long-term LAN capacity needs to perform network design and capacity planning specific to VOIP networks. Uses tools and regular site visits to identify and remediate communication issues.

Conducts research on VOIP products, services, protocols, and standards to remain abreast of developments in the industry.

Works with vendors and manufacturers in clearly identifying code bugs and system shortcomings.

Interacts and negotiates with vendors, outsourcers, and contractors to secure VOIP products and services.

Develops, implements, and maintains policies, procedures, and associated training plans for VOIP administration, appropriate use, and disaster recovery.

Maintains inventory of VOIP equipment, related documentation, and technical specifications information.

Administers and maintains end user accounts, permissions, and access rights.

Monitors and tests VOIP performance and provides VOIP performance statistics and reports. Designs schedules, and performs VOIP improvements, upgrades, and repairs.

Configures VOIP systems to ensure their smooth and reliable operation for fulfilling business objectives and processes. Documents the VOIP architecture, design, and layout, including protocols and standards used, as well as documents procedures for maintaining and troubleshooting VOIP systems and components.

Deploys VOIP systems, including switches, servers, PRIs, intercoms, and other hardware and services. Installs VOIP hardware in designated locations; inspects connectivity. Installs cable drops for VOIP hardware.

Maintains operating systems and supporting software or applications associated with VOIP operations.

Ensures voice communication connectivity to all required areas.

Designs, builds and retrofits data closets, installs other new copper and fiber data drops using district network standards.

Coordinates closely with the Network & Security Manager on all deployments, designs, and issues.

#### **SUPERVISORY RESPONSIBILITIES**

This position has no supervisory responsibilities unless directed by Network & Security Manager.

**KNOWLEDGE, SKILLS, ABILITIES, AND QUALIFICATIONS** *To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. Must demonstrate an acceptable level of maturity, good judgment, and emotional stability.*

Ability to configure Cisco switches, ShoreTel/Mitel switches, phones, and servers.

Demonstrated understanding of VOIP protocols, TCP/IP, POE, and electromagnetic interference.

Demonstrated competence with testing tools and procedures for voice and data circuits.

Ability to read, write, and communicate effectively in English at a level required for successful job performance. Ability to read and interpret documents such as safety rules, operating and maintenance instructions, and procedure manuals. Ability to write routine reports and correspondence. Ability to speak effectively before groups of employees of the school district.

Ability to work with applicable mathematical concepts. Ability to apply concepts such as fractions, percentages, ratios, and proportions to practical situations. Ability to perform mathematical operations using units of American money.

Ability to apply common sense understanding to carry out essential duties of this position. Ability to carry out instructions furnished in written, oral, or diagram form. Ability to

troubleshoot and solve problems involving concrete variables situations. Ability to define problems, collect data, establish facts, and draw valid conclusions.

**EDUCATION and/or EXPERIENCE**

Bachelor’s degree in the field of Computer Science, Computer Engineering, or Electrical Engineering and 3 years equivalent work experience or the equivalent combination of significant college education and related work experience.

Proven experience and success with enterprise level VOIP engineering, design, and implementation.

Experience with various operating systems, including Windows, Linux, Mac OS, ChromeOS, Android, and iOS.

**CERTIFICATES, LICENSES, REGISTRATIONS**

MCSE, CWSP, CWAP, CWNA, or CWNE certification(s) recommended.

Must have and maintain an active Utah Driver’s License. Must complete Utah Risk Management Defensive Driver training every two years. (Utah Code R31-1)

**PHYSICAL DEMANDS** *The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.*

While performing the duties of this job, the employee is regularly required to sit; use fingers and hands to handle. The employee frequently is required to stand and walk; talk or hear; reach with hands and arms. The employee is occasionally required to stoop, kneel, crouch, or crawl. The employee must regularly lift and/or move up to 25 pounds and occasionally lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and ability to adjust focus.

**WORK ENVIRONMENT** *The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.*

While performing the duties of this job, the employee is regularly exposed to moving mechanical parts, outside weather conditions, and risk of electrical shock. The noise level in the work environment is usually moderate.

Prepared By: <b>Technology &amp; Media Director II</b>		Date: <b>05/08/2008</b>
Approved By: <b>Executive Director, Human Resources</b>		Date: <b>06/03/2008</b>
<input checked="" type="checkbox"/> Reviewed <input type="checkbox"/> Revised	By: <b>HR Position Management Specialist</b>	Date: <b>09/29/2015</b>
<input type="checkbox"/> Reviewed <input checked="" type="checkbox"/> Revised	By: <b>HR Assistant Director</b>	Date: <b>01/16/2019</b>

<input type="checkbox"/> Reviewed	<input checked="" type="checkbox"/> Revised	By: <b>Network &amp; Security Manager</b>	Date: <b>12/19/2019</b>
<input type="checkbox"/> Reviewed	<input type="checkbox"/> Revised	By:	Date:

---

**EMPLOYEE ACKNOWLEDGEMENT OF RECEIPT:**

*By signing below, I acknowledge that I have received a district approved position description for my current position. I understand it is my responsibility to review the position description and direct any questions regarding the position description to my department supervisor or the Human Resources Department.*

Print Name:	Date:
Employee Signature:	