

## **JOB ANALYSIS - Network Analyst**

JOB ANALYST: Nancy Kennedy, MS,CRC	DATE OF ANALYSIS: April 2019
PHONE #: (800) 477-0626 X 4435	DATE REVISED: July 2019
Conducted for: Chico Unified School District	Information Provided by: Director of Technology and Network Analysts

**General Description:** Under direction the Network Analyst performs a variety of duties involved in the design, installation, configuration and maintenance of local area and wide area networks; operates and maintains computer and peripheral equipment; and, troubleshoots and resolves problems with computer and peripheral equipment. As assigned, the Network Analyst will exercise technical and functional supervision over lower level staff.

### **Essential Job Functions:**

**Assist in the design of District local-area and wide-area networks (WAN); install, configure and maintain network routes, wiring, and wireless access points (WAP); install and administer servers and systems, integrate new technologies that interface with network systems; install, troubleshoot and resolve problems with network and network services.**

**Administer and implement network and computer security systems; establish and enforce District server standards and protocols.**

**Administer Directory Services, manage group policy and permissions.**

**Manage E-Mail accounts and ensure security of the District E-Mail system; and, manage/maintain the domain name services for district WAN.**

**Oversee the development of the Internet Information System, and assist in the preparation and implementation of the assigned budget for network and computer equipment projects.**

**Operate and understand the operation of the District computer systems and peripheral equipment.**

**Observe equipment for proper operation; monitor computer systems for optimum user and job utilization; take corrective action as necessary; produce reports, documents and other output.**

**Perform system configuration backup on network equipment and systems.**

**Respond to remote site equipment problems; determine which equipment link is not functioning properly.**

**Train and assist users in the implementation of new or changed on-line remote equipment; provide training and assist users with more complex E-Mail and/or other network services issues or systems that interface with the network.**

**Order necessary supplies according to established procedures.**

**Perform personal computer software/hardware installation and troubleshooting as assigned.**

Attend and participate in staff meetings and in-service activities; attend workshops, conferences and classes to increase professional knowledge; stay abreast of new technologies and software.

Assist and oversee special projects as assigned.

### **Required Knowledge Skill and Abilities**

**Knowledge of:** Principals and practices used in the design, configuration, installation and maintenance of computers and networking equipment, including servers; data processing operations, services, and technology; capabilities, capacities, limitations and interrelated uses of computers and peripheral equipment; computer operating systems and utility programs; proper use and operation of software and system applications; principles and practices used in the set up and administration of multi-user systems; recent developments, current literature and sources of information regarding computer systems; principals and practices used in training of staff; modern office practices, methods and computers and systems; principles and procedures of record keeping and reporting; mathematical principals; District policies and procedures pertinent to scope of responsibility, including safety practices and procedures; safe driving principals and practices.

**Skill/Ability to:** Read and comprehend a variety of written, electronic and oral information or instructions; read, interpret and apply a wide range of detailed or technical information from manuals, drawings, or other documents; operate a variety of highly technical computer equipment and related peripheral equipment; identify, troubleshoot and resolve equipment link problems related to telephone lines, cables, switches, routers and network systems; independently set up, install, operate and troubleshoot computers, systems, software, hardware and peripheral equipment; learn new software products and related technical data without formal training; train and instruct staff in the use of computer applications, current or new systems and devices, E-Mail and network services; perform accurate mathematical computations quickly; communicate clearly and concisely, both orally and in writing; prepare clear and concise reports and accurate and complete records; operate modern office equipment, including a keyboard or other input/control devices at a proficient level for successful job performance; respond to requests and inquiries from all parties, including the general public in a timely manner; understand the organization and operation of assigned office and the District in order to assume assigned responsibilities, including locations where equipment is located; establish, foster and maintain positive and harmonious working relationship with all those contacted in the course of work; drive to various locations within the district as warranted by assignment. Adhere to all District policies and procedures applicable to scope of work; possess and maintain a valid driver's license and drive to and from campuses or district facility locations adhering to safety practices and applicable traffic laws; work on a public school campus and around minor children.

### **Physical Demands:**

**Definitions for rating Physical Demands (Per U.S. Department of Labor Definition) used in this report:**

<b>Rating</b>	<b>Rarely - &lt; 1%</b>	<b>Infrequently 2-5%</b>	<b>Occasionally 6-33%</b>	<b>Frequently 34-66%</b>	<b>Constantly 67% +</b>
Sedentary			0 – 10 lbs.		
Light			11 – 20 lbs.	0 – 10 lbs.	
Medium			21 – 50 lbs.	11 – 25 lbs.	1 – 10 lbs.
Heavy			51 – 100 lbs.	26 – 50 lbs.	11 – 20 lbs.
Very Heavy			100 + lbs.	50 + lbs.	20 + lbs.

**STANDING:** *Remaining on one's feet in an upright position at a workstation without moving about.*

**Occasionally to Frequently.** Standing occurs to inspect equipment/facilities and to perform various tasks requiring maintaining a stationary position for several minutes or longer without change of position, including standing on a step stool or ladder to access equipment located above shoulder when working on servers stored on racks. Standing occurs to remove/replace parts or equipment, troubleshoot/make adjustments to equipment/controls, and similar job functions. Standing primarily occurs on interior surfaces, or improved areas at campus sites. Duration varies from 10 to 15 minutes, but may be repeated if installing equipment.

**WALKING:** *Moving about on foot.*

**Occasionally.** Walking occurs throughout the work day, and depending on tasks performed. Walking occurs within the Technology Center shop 20 to 100 feet; to and from vehicle to work site around or within school campuses or District facilities, or off-premise locations, varying up to several hundred yards. Walking occurs at interiors of buildings and adjacent exterior surfaces.

**SITTING:** *Remaining in the normal seated position.*

**Occasionally to Constantly.** Sitting at computer workstations to monitor and update data based information, and when responding to inquiries or issues from staff. Sitting also occurs to access and read technical data, or to troubleshoot various systems. When applicable sitting will occur to drive to various district campuses or sites to install or maintain equipment, or for training purposes. Duration varies due to function performed for 20 minutes to 2+ hours.

**LIFTING:** *Raising or lowering an object from one level to another (including upward pulling).*

	Never	Rarely	Infrequently	Occasional	Frequently	Constantly	Height
Under 10 lbs.					<b>X</b>		<b>Floor to Overhead</b>
10 – 20 lbs.			<b>X-----</b>	<b>-----X</b>			<b>Floor to Overhead</b>
21 – 35 lbs.			<b>X</b>				<b>Floor to Shoulder</b>
36 – 50 lbs.			<b>X</b>				<b>Floor to Mid-torso</b>
51 - 75 lbs.			<b>X*</b>				<b>Floor to Mid-torso</b>
76 - 100 lbs.		<b>X*</b>					

Typical or representative items lifted (not a comprehensive list):

0 – 10 lbs.: Switches, WAPs, various hand tools, cords, etc.

11 – 20 lbs.: Smaller towers, or ladders

21 – 35 lbs.: Large ladder, tool bag

36 – 50 lbs.: Heavier equipment; rack equipment, etc.

51 - 75 lbs.: Heavier equipment; rack equipment, etc.

\*Single items heavier than 50 lbs. are usually lifted with assistance from co-worker.

**CARRYING:** *Transporting an object usually holding it in the hands, arms or shoulders.*

	Never	Rarely	Infrequently	Occasionally	Frequently	Constantly	Distance
Under 10 lbs.				<b>X</b>			<b>Any distance walked</b>
10 – 20 lbs.				<b>X</b>			<b>Any distance walked</b>
21 – 35 lbs.			<b>X</b>				<b>Up to 100 yards**</b>
36 – 50 lbs.			<b>X*</b>				<b>Several feet</b>
51 – 75 lbs.		<b>X*</b>					<b>Several feet</b>
76 – 100 lbs.		<b>X*</b>					<b>Several feet</b>

See Lifting Section for typical items carried. \* Items transported via cart \*\* Additional distance at discretion, or if no cart is applicable or available.

**PUSHING/PULLING:** *To exert force on or against an object in order to move it away, OR To draw towards oneself, in a particular direction or into a particular position.*

**0 - 10 lbs. - Infrequently.** Pushing or pulling to move and maneuver objects, equipment, parts, tools, etc. occurs routinely for short durations, including sliding equipment in/out of service vehicle, or equipment on racks or shelves, etc. Pulling or pushing is required to open/close doors, hatches, drawers, etc. Force is applied with hands/arms unilaterally or bilaterally, and with upper torso.

**11- 50 lbs. - Rarely to Infrequently.** Variable force is required as an initial or sustained push or pull using hands/arms, upper body, or full body (legs) to push or pull to set up a ladder, to dislodge a heavier component, or installing equipment; loading/unloading heavier materials.

**CLIMBING:** *Ascending or descending ladders, stairs, scaffolding, ramps, poles and the like using hand and feet.*

**Rarely to Occasionally.** Climbing occurs when serving or installing equipment located on racks or shelves, accessing cabling in ceilings, or to access locations within a building if necessary. Climbing occurs to access buildings using stairways, or ramps, and site provided ladders are used for overhead work. Climbing is generally for a short duration to access the height or level where work is to be performed, but may be repeated frequently to access parts, equipment, or supplies. Steps, stairs, ramps and ladders used are standard rise (step, ladder rung, or slope height).

**BALANCING:** *Maintaining body equilibrium to prevent falling when walking, standing, crouching or running on narrow, slippery or erratically moving surfaces.*

**Infrequently to Occasionally.** A good overall sense of balance is required to perform routine job duties. Maintaining equilibrium and steadiness is required when moving or maneuvering, loading/unloading equipment and materials, and when working from a ladder.

**STOOPING/BENDING:** *Bending body downward and forward by bending spine at the waist, requiring full use of the lower extremities and back muscles.*



**20 Degrees- Infrequently.** Forward bending or stooping occurs to access supplies and install or remove/replace equipment. Flexibility of the upper torso is also required when ascending or descending ladders. Duration is generally brief, but may be sustained for several minutes, and repeated.



**45 Degrees- Rarely to Occasionally.** Forwarding bending occurs to access tools and equipment, and is required to perform work on equipment with confined or limited access. Duration is usually as an up and down motion, however, will be sustained in situations where crouching/squatting, or kneeling is not expedient or viable. Good flexibility is required when mounting or dismounting a ladder.

**90 Degrees- Not Required.**



**TWISTING/TURNING:** *Rotating the torso. This includes turning of upper and lower back, and hips.*

**Up to Occasionally, 0-45 degrees.** A slight twist (0 - 20/30 degrees) will occur to routinely when accessing various areas, tools/equipment, and etc. Twisting up to 45 degrees occurs as necessary to access areas from a stationary position, including when on a ladder. Twisting will involve upper and/or lower body turning and pivoting to load/unload equipment, or to access confined space areas.

**KNEELING:** *Bending legs at knees to come to rest on knee or knees.*

**Infrequently.** Kneeling on one or both knees occurs to perform work tasks on lower levels where a steady or prolonged position is required to complete work. This is common for floor-level equipment, or any lower level area. Duration varies with scope of task. Where kneeling is not possible due to confined space, laying down on back or side will be performed to the same frequency.

**CROUCHING/SQUATTING:** *Bending body downward and forward by bending legs and spine.*

**Crouching- Infrequently to Occasionally.** Crouching occurs when lifting heavier or large objects to load or unload, or to place or position equipment or materials when performing routine and non-routine tasks.

**Squatting- Not Required.** Squatting will occur at discretion instead of kneeling.

**CRAWLING:** *Moving about on hands and knees or hands and feet.*

**Rarely.** Crawling will occur to access confined areas, such as attics or interstitial spaces to locate or work on cabling, and as necessary to access cords or connections under a desk or table. Crawling is generally for a few feet. but is usually not required a daily basis. Multiple trips may be necessary to perform special projects.

## **NECK POSITIONS:**

**Extension: 0 - 70 degrees: Infrequently.** Looking upward as a glance to view upper level areas and when climbing a ladder. The nature of work performed requires fluid neck movement to full range. Sustained neck extension will vary in duration, but may be repetitive based on the type of equipment and function performed; i.e., overhead wiring/cabling.

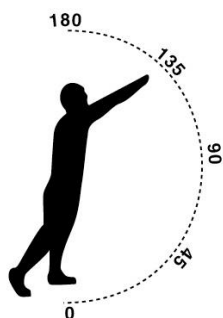
**Flexion: 0 - 80 degrees: Infrequently to Occasionally.** Looking downward occurs to view immediate surroundings, perform routine work tasks, pick up and move items, etc. Neck flexion will occur as a quick glance as well as a sustained position.

**Left/Right Lateral Rotation: 0 - 45+ degrees: Occasionally.** Glancing left and right will occur when driving or viewing immediate surroundings. Generally, left or right rotation will occur as brief glances or sustained period less than 1 minute.

**Left/Right Lateral Flexion: 0 – 45 degrees: Rarely to Infrequently.** Tilting the head left or right will occur when viewing from behind an obstacle (equipment) in order to check rear connections, or remove/replace equipment. It occurs as necessary when a change of stance is not expedient or convenient to the situation.

**REACHING:** *Extended hand(s) and arm (s) in any direction.*

**Forward:** Forward reaching occurs routinely to access items and perform routine tasks. Full forward and partial forward reaching occurs bilaterally and unilaterally left or right to the frequencies indicated below:



**135 to 180 Degrees - Rarely to Infrequently**  
**90 to 135 Degrees - Infrequently to Occasionally**  
**45 to 90 Degrees - Infrequently to Occasionally**  
**Below 45 Degrees - Infrequently**

**Abduction (Side reaching 0 - 180 Degrees): Not Required.**

**Horizontal Abduction (0 -90 Degrees)/Horizontal Adduction (0 - 45 Degrees): Infrequently to Occasionally.** Horizontal abduction or adduction will be necessary when moving tools or equipment in the course of performing routine tasks. Range varies significantly according to each situation, but in general full range is required to perform work safely both bilaterally and unilaterally.

**HANDLING:** *Seizing, holding, grasping, turning, or otherwise working with hand or hands. Fingers are involved only to the extent that they are an extension of the hand, such as to turn a switch.*

**Occasionally to Frequently.** Holding, gripping, turning with one or both hands is required to use hand tools, remove and replace equipment, to drive or operate vehicle. Troubleshooting or installing equipment will involve lateral grasping, tip-pinching, spherical grasping, and firm power grasping with full fluidity of wrists. A three-point pinch is required to write and use some hand tools. Handling involves intermittent repetitive and short cycle actions.

**FINGERING:** *Picking, pinching, touching, feeling or otherwise working primarily with fingers rather than with the whole hand or arm as in handling, and key-stroking.*

**Up to Frequently.** Fingering tasks principally involve using a keyboard effectively to enter and change data, and to complete required documentation. Fine finger tasks also involve separating (wrapping or wires, etc.), pinching (setting a screw), using or fingers to twist or sort parts, and similar tasks. All work performed requires documentation, as well as interfacing with various computerized data, as well as responding or sending emails, or other electronic communication using an input device or cellular device.

**TALKING:** *Expressing or exchanging ideas by means of the spoken work.*

Speaking is required in order to effectively communicate with co-workers, supervisions, vendors, and school site personnel on a regular basis; and anyone with whom contact is made during the course of work. Speaking in a normal

volume to be understood using communication devices is required, and also in situations where there is loud background noise from operating equipment typical of switch rooms.

**HEARING:** *Perceiving the nature of sounds by ear.*

Normal, near normal, or corrected to-hearing is required to detect unusual sounds and noises from operating equipment, or malfunctioning equipment. This will include identifying usual sounds, as well as normal speech communication in-person or over a communication device. The ability to identify and correctly and efficiently respond to alarms and warning signals is required.

**SEEING:**

Normal, near normal or corrected to-vision is required in order to effectively and accurately performs all job tasks. The ability for near acuity (< 20 inches), far acuity (> 20 feet), depth perception, field of vision, accommodation (adjusting focus), and color identification is required. Network Analysts must be able to use tools and parts in close proximity, drive and judging distances involving far acuity, field of vision and depth perception. Accommodation is required when assisting others or making adjustments to equipment, and color identification is required for identification of low voltage wiring, or color coded parts or mechanisms, etc.

**ENVIRONMENTAL CONDITION - EXPOSURE TO: (Checked items apply)**

- ☒ Weather - Varies 65 to 80% inside, 20 to 35 % outside
- ☐ Extreme Cold -
- ☐ Extreme Heat -
- ☒ Wet and/or Humid - Higher humidity within some rooms
- ☒ Noise intensity level - Operating equipment in switch room - no hearing protection required
- ☐ Vibration -
- ☒ Atmospheric Conditions - Ambient dust, some musty confined areas
- ☒ Electrical Shock - Potential only - malfunctioning equipment
- ☒ Work in High Exposed Places - work performed from ladders, roof tops
- ☐ Radiation (i.e. X-ray)
- ☐ Explosives
- ☒ Hazardous Materials - battery packs
- ☐ Proximity to Moving Mechanical Parts -
- ☐ Other Environmental Conditions -

**PSYCHOLOGICAL FACTORS:**

1. **ABILITY TO COMPREHEND AND FOLLOW INSTRUCTIONS:** *The ability to maintain attention and concentration for necessary periods. The ability to understand written and oral instructions, and the ability to do work requiring set limits, tolerances, or standards.*

100% of job functions are dependent upon clear understanding of methods and procedures and the exact nature of the work assignment. Periods of concentration are required to complete tasks in a timely and accurate manner and to achieve proper set limits, tolerances and/or standards due to the purpose and function of the position.

2. **ABILITY TO PERFORM SIMPLE AND REPETITIVE TASKS:** *The ability to ask simple questions or request assistance; the ability to perform activities of a routine nature; and the ability to remember locations and work procedures. The ability to obtain information and answer questions regarding company procedures, or standards for immediate staff is required.*

Approximately 40% of tasks involve routine simple tasks that are performed over the course of the work day or are repetitive in nature. These include routine documentation, responding to telephone or email issues, perform minor adjustments to equipment. As tasks are performed at any one of the District's facilities, the location of these sites, where materials are stored, and who responsible parties are must be remembered, as well as the critical factor of remembering and applying routine work procedures. General information will be provided regarding procedures or policies to supervisors, co-workers, and site staff and will involve asking questions or requesting assistance.

3. **THE ABILITY TO MAINTAIN A WORK PACE APPROPRIATE TO A GIVEN WORKLOAD:** *The ability to perform activities within a schedule, maintain regular attendance and be punctual; and the ability to complete a normal workday and/or work week and perform a consistent pace.*

100% of job functions involve timelines to complete tasks and the adherence to a designated schedule. Assignments are made based on priority to the District as they affect the general safety and upkeep of facilities and the effectiveness of educational programs. Maintaining regular attendance and punctuality is important to minimize the effect on other workers and the educational program. Work assignments may be based on a deadline for completion. Work tasks require mental and physical stamina to perform tasks at a regular and/or consistent pace to avoid potential hazards, unfinished or extra work.

4. **ABILITY TO PERFORM COMPLEX AND VARIED TASKS:** *The ability to synthesize, coordinate, and analyze data; and the ability to perform jobs requiring precise attainment of set limits, tolerances and standards.*

Approximately 60% of job tasks involve coordination of activities, and/or the ability to analyze or troubleshoot more complex network systems and issues. Analytical ability is required to understand and apply technical information or data to diagnose performance issues, or to repair/replace sensitive components and to integrate new network security systems. Attaining precise adherence to specifications is required at all times for any work performed. Assessing potential needs for current or potential work requires analysis or synthesis of multiple factors and the interrelationship to equipment, network systems and essential security to maintain the District's infrastructure and effectiveness. Assigned special projects will require the ability to coordinate implementation of plans and function of other workers to meet objectives.

5. **ABILITY TO RELATE TO OTHER PEOPLE BEYOND GIVING AND RECEIVING INSTRUCTIONS:** *The ability to get along with coworkers or peers; the ability to perform work activities requiring negotiation with, explaining, or persuading; and the ability to respond appropriately to evaluation or criticism.*

40-60% of job functions involve the ability to get along with coworkers and others encountered in the course of work. Work is performed in a team atmosphere where communication and providing customer service is critical. Network Analysts have contact via in-person, telephonic or email communications with end-users of the network or managed network systems. Listening and understanding of issues or complaints requires the ability to effectively explain technical issues to obtain a resolution. Perceived negativity must be resolved or handled appropriately. Work is performed at public school campuses or district offices where a variety of persons will be encountered on a regular basis, and work performed may interrupt activities. Workers must possess the ability to establish, foster and maintain effective working relationships by understanding and responding appropriately to others.



6. **ABILITY TO INFLUENCE PEOPLE:** *The ability to convince or direct other; the ability to understand the meaning of words and to use them appropriately and effectively; and the ability to interact appropriately with people.*

40% of job functions involves directing, or influencing others; including the training of individuals on technical information and usages. In all cases, where interaction with others is required or necessary, proper language and word usage is important, especially when dealing with children, or where children are present. At all times, the ability to interact appropriately with people is required.

7. **ABILITY TO MAKE GENERALIZATIONS, EVALUATIONS, OR DECISIONS WITHOUT IMMEDIATE SUPERVISION:** *The ability to recognize potential hazards and follow appropriate precautions; the ability to understand and remember detailed instructions; the ability to make independent decisions or judgments based on appropriate information; and the ability to set realistic goals or make plans independent of others.*

Network Analysts are responsible to assess solutions when troubleshooting or determining issues effecting the function and/or security of network and network managed systems, and obtain concurrence from others including supervision. Network Analysts work as a team to ensure effective operation of the network system and other managed systems. Special projects require the ability to utilize guidelines and objectives, and to foresee potential obstacles, difficulties, and hazards and take appropriate actions. When working independently, the ability to recognize potential hazards and follow appropriate precautions and use good judgment is required.

8. **ABILITY TO ACCEPT AND CARRY OUT RESPONSIBILITY FOR DIRECTION, CONTROL, AND PLANNING:** *The ability to set realistic goals or make plans independently of others; the ability to negotiate with, instruct or supervise people; and the ability to respond appropriately to changes in the work conditions.*

The Network Analyst must respond appropriately to changes in work conditions, including changes to a regular daily schedule due to a higher priority; re-routing or re-organizing tasks in order to fill in at another work assignment, or to accept other related or non-related tasks based on the needs of the District. Network Analysts are required to assist in the training of technical issues, or new system requirements and procedures, to less experienced workers. Job functions will require planning for or assuming the responsibility for lower level staff assigned to special projects.