

EMPLOYEE:

CLAIM #



**Job Analysis Form**  
**ALTERNATE FORMAT AVAILABLE**

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**JOB TITLE** Network Engineer

**JOB CLASSIFICATION** Network Engineer - Journey

**DOT TITLE** Computer Systems Hardware Analyst

**DOT NUMBER** 033.167-010

**DEPARTMENT** Office of Information and Resource Management **DIVISION** King County Executive Office

**# OF POSITIONS IN THE DEPARTMENT WITH THIS JOB TITLE** 3

**CONTACT'S NAME & TITLE** Lori Dickneite, Supervisor

**CONTACT'S PHONE** 206-263-7851

**ADDRESS OF WORKSITE** 401 Fifth Ave STE 0700, Seattle WA 98103

**VRC NAME** Kyle Pletz

**DATE COMPLETED** 11/14/03

**VRC NAME** Jeff Casem

**DATE REVISED** 5/14/09

**WORK HOURS** Monday through Friday 8:00am-5:00pm with 2 15-minute breaks and a 1-hour lunch. The employee rotates on call for 7 days approximately every 8 weeks (employees receive one paid day off for being on call).

**OVERTIME** (Note: Overtime requirements may change at the employer's discretion)  
This position is overtime exempt, but comp time is present and required, approximately 100 hours per year.

**JOB DESCRIPTION**

Provides electronic data transport services for the County. Services provided by Network Engineers include on-site and remote integration, support and development services to the entire King County Wide Area Network ("KCWAN"), the Institutional Network ("I-Net") and the Intergovernmental Network ("IGN"), which services King County government and independent organizations supported by contract. Network Engineers are responsible for County-wide services including telephone, internet access, data and video transmission, and security.

**ESSENTIAL ABILITIES FOR ALL KING COUNTY JOB CLASSIFICATIONS**

1. Ability to demonstrate predictable, reliable, and timely attendance.
2. Ability to follow written and verbal directions and to complete assigned tasks on schedule.
3. Ability to read, write & communicate in English and understand basic math.
4. Ability to learn from directions, observations, and mistakes, and apply procedures using good judgment.

5. Ability to work independently or part of a team; ability to interact appropriately with others.
6. Ability to work with supervision, receiving instructions/feedback, coaching/counseling and/or action/discipline.

### **JOB SPECIFIC REQUIREMENTS**

Knowledge of wide area networks and local area networks technologies, network design and implementation as well as configuration management, including configuration of carrier class routers, large "smart" switches, ATM switches, hubs, VPN, and DNS. Must have advanced knowledge of security systems, installing and enhancing routing protocols, creating scripts, planning and implementing Frame Relay, ISDN, DSL and other technologies for a large WAN/LAN environment. Must also have advanced knowledge of multiple operating systems and platforms, internet and other related technologies. Must have knowledge of wiring, copper and fiber optics cable, circuits, grounding, electrical, physical security, power requirements, and HVAC requirements as well as project management principles and methods. Must have skill in reading and interpreting architectural designs, technical specifications and other technical documents, using engineering and monitoring tools, technical consulting and sales processes, working with a variety of individuals from diverse backgrounds, conveying technical information to non-technical users, handling multiple competing priorities, and troubleshooting, analytical and problem solving skills. Must have oral and written communication skills, project management and vendor management skills, documentation and report writing skills as well as customer service skills.

### **ESSENTIAL FUNCTIONS**

1. Implements network transport systems to provide connectivity to County government employees, and those entities contracting independently with the County, including cities, other governments, schools, non-profit organizations and businesses connected through the I-Net, IGN, Internet, or other systems; services provided include telephone, Internet access, data and video transmission, and security. Provides design and installation services for LANs, large building infrastructure, campus LAN, and WAN.
2. Evaluates customer needs in designing LAN, WAN and other network communications solutions for County departments and external customers.
3. Participates in the development of network standards and procedures.
4. Participates in project needs analysis, consultation and design, recommendations and implementation.
5. Implements office moves, fiber and cable; designs network infrastructure for new and remodeled facilities; manages contractors.
6. Provides ongoing maintenance and support of existing networks, including configuring carrier class routers, large "smart" switches, LANs, switches, hubs, related servers, Frame Relay, ISDN and other wide area network devices and services.
7. Provides contracted services as specified in service level agreements; ensures that agreed upon performance measures are met.
8. Coordinates efforts with vendors for upgrades and network maintenance; assumes contract management duties as needed.
9. Acts as technical lead or Subject Matter Expert on specific projects.

10. Troubleshoots WAN and LAN problems and LAN/WAN connectivity problems as reported by LAN administrators or users; helps IT staff diagnose LAN/WAN problems; and may help configure department's applications or systems.
11. Escalates/refers unresolved problems to appropriate resources; works with vendors to resolve problems.
12. Implements change or upgrade requests.
13. Installs new service packs and upgrades.
14. Updates user access rights.
15. Manages planned and unplanned network outages and other events.
16. Monitors systems, including firewalls, VPN, and alarm messages; sends out network alerts.
17. Implements changes across the entire network as indicated.
18. Implements County-wide security systems: designs or implements firewalls, VPN security, DNS structures, back-up systems, disaster recovery, etc.
19. Consults on server protection issues; monitors critical LANs or other systems according to service agreements; provides specialized security solutions as needed.
20. Documents all engineering work, problem resolution, recurring problems, and develops technical reports.
21. Creates reports for County IT staff to improve understanding of network engineering services.
22. May be called upon to provide support for service issues or failures at any time.
23. Drives a County vehicle to various locations to provide service to County employees and contracting entities.
24. Must be able to pass a background check

#### **PERSONAL PROTECTIVE EQUIPMENT USED**

None Identified.

#### **OTHER TOOLS & EQUIPMENT USED**

Computer, phone, laptop computer, cable testing and network analysis equipment, screw driver, wire cutters, various hand tools, printer, fax machine, copy machine, hand truck, cart, routers and switches.

#### **PHYSICAL DEMANDS AS JOB IS TYPICALLY PERFORMED**

Continuously = occurs 66-100% of the time

Frequently = occurs 33-66% of the time

Occasionally = occurs 1-33% of the time

Rarely = may occur less than 1% of the time

Never = does not ever occur (such demands are not listed)

Highly Repetitive = Repeating the same motion every few seconds with little or no variation for more than two hours total per day.

#### **This job is classified as**

Medium—exerting 20 to 50 pounds of force occasionally, and/or 25-50 pounds of force frequently, and/or 10-20 pounds of force constantly.

**Standing**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally on flat carpeted, cement, linoleum or tile surfaces for up to 5 minutes at a time for up to 40 minutes total in a work shift. Most commonly occurs while troubleshooting, coordinating logistics and installing equipment.

**Walking**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally on flat carpeted, cement, linoleum or tile surfaces for distances of up to 8 city blocks for up to 15 minutes at a time for up to 2 hours total in a work shift. Most commonly occurs while walking between County buildings and within office areas to provide service to County employees and contracted entities.

**Sitting**

Health Care Provider initials if restricted \_\_\_\_\_

Continuously on an office chair for up to 2.5 hours at a time for up to 7 hours total in a work shift. Most commonly occurs while performing paperwork, answering telephones and attending meetings as well as performing computer duties which include working with spreadsheets, databases, network monitoring tools.

**Climbing stairs**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely for up to 30 seconds at a time while climbing up to 1 flight for up to 1 minute total in a work shift. Most commonly occurs while traversing stairs to get to a server room. Elevators are available at most County locations.

**Climbing**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely on a ladder to heights of up to 8 feet for up to 10 seconds at a time for up to 1 minute total in a work shift. Most commonly occurs while running cables through ceiling areas.

**Balancing**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely on a ladder to heights of up to 8 feet on a roof top for up to 15 minutes at a time for up to 15 minutes total in a work shift. Most commonly occurs while running cables through ceiling areas and inspecting wireless equipment on rooftops once per year.

**Bending neck up**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely for up to 10 seconds at a time for up to 1 minute total in a work shift. Most commonly occurs while running cables through ceiling areas.

**Bending neck down**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely for up to 1 minute at a time for up to 5 minutes total in a work shift. Most commonly occurs while hooking up equipment in low areas.

**Bending/Stooping**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally on flat carpeted, cement, linoleum or tile surfaces for up to 2 minutes at a time for up to 10 minutes total in a work shift. Most commonly occurs while running wires, hooking up equipment or placing equipment on a rack. The employee can reduce bending/stooping by alternating with kneeling or squatting.

**Kneeling**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally on flat carpeted, cement, linoleum or tile surfaces for up to 2 minutes at a time for up to 10 minutes total in a work shift. Most commonly occurs while running wires, hooking up equipment or placing equipment on a rack. The employee can reduce kneeling by alternating with bending/stooping or squatting.

**Squatting**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally on flat carpeted, cement, linoleum or tile surfaces for up to 2 minutes at a time for up to 10 minutes total in a work shift. Most commonly occurs while running wires, hooking up equipment or placing equipment on a rack. The employee can reduce squatting by alternating with kneeling or bending/stooping.

**Operating Controls with Feet**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally for up to 30 minutes at a time for up to 1 hour total in a work shift while driving a County vehicle to various locations to provide service to County employees and contracting entities. Driving occurs approximately 3 times per week.

**Reaching above shoulder height**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely for up to 10 seconds at a time for up to 5 minutes total in a work shift. Most commonly occurs while running cables through ceiling areas and installing equipment in racks.

**Reaching at waist to shoulder height**

Health Care Provider initials if restricted \_\_\_\_\_

Continuously for up to 2.5 hours at a time for up to 7 hours total in a work shift. Most commonly occurs while performing paperwork and answering telephones as well as performing computer duties which include working with spreadsheets, databases, network monitoring tools.

**Reaching at knee to waist height**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally for up to 2 minutes at a time for up to 10 minutes total in a work shift. Most commonly occurs while running wires, hooking up equipment or placing equipment on a rack.

**Reaching at floor to knee height**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally for up to 2 minutes at a time for up to 10 minutes total in a work shift. Most commonly occurs while running wires, hooking up equipment or placing equipment on a rack.

**Lifting 1-10 pounds**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely for up to 1 minute at a time for up to 5 minutes total in a work shift. Most commonly occurs with weights of 3-8 pounds at various heights while hooking up equipment or placing equipment on a rack.

**Carrying 1-10- pounds**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally for distances of up to 8 city blocks for up to 15 minutes at a time for up to 1 hour total in a work shift. Most commonly occurs with weights of 6-10 pounds while carrying a laptop between various County buildings.

**Lifting 11-20 pounds**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely for up to 10 seconds at a time for up to 30 seconds total in a work shift. Most commonly occurs with weights of 15-20 pounds at various heights while manipulating routers, switches and power supplies.

**Lifting 21-50 pounds**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely for up to 10 seconds at a time for up to 30 seconds total in a work shift. Most commonly occurs with weights of up to 50 pounds at various heights while manipulating large routers, switches and power supplies on and off racks and carts. Lifting assistance is available for heavy lifting.

**Pushing and Pulling**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally for distances of up to 8 city blocks for up to 15 minutes at a time with a force of up to 10 pounds for up to 30 minutes total in a work shift while using a cart to transport equipment between various County buildings as well as when manipulating equipment on racks.

**Handling**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally for up to 30 minutes at a time for up to 2.5 hours total in a work shift while using various hand tools and driving as well as manipulating a computer mouse and various pieces of equipment.

**Operating Controls with Hands**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally for up to 30 minutes at a time for up to 2.5 hours total in a work shift while driving and manipulating a computer mouse.

**Fingering**

Health Care Provider initials if restricted \_\_\_\_\_

Continuously for up to 2 hours at a time for up to 6 hours total in a work shift while using a computer mouse, writing, typing, manipulating documents, using hand tools and manipulating equipment.

**Talking**

Health Care Provider initials if restricted \_\_\_\_\_

Frequently for up to 5 minutes at a time for up to 3 hours total in a work shift while using the telephone, troubleshooting and coordinating logistics as well as conversing with co-workers, County employees and contracting entities.

**Hearing**

Health Care Provider initials if restricted \_\_\_\_\_

Frequently for up to 1 hour at a time for up to 3 hours total in a work shift while using the telephone, troubleshooting, attending meetings and coordinating logistics as well as conversing with co-workers, County employees and contracting entities.

**Seeing**

Health Care Provider initials if restricted \_\_\_\_\_

Continuously for up to 2.5 hours at a time for up to 7 hours total in a work shift while monitoring systems, including firewalls, VPN, and alarm messages as well as routing wires and installing equipment.

**ENVIRONMENTAL FACTORS**

Work is generally performed in an office environment with minimal exposure to health and safety hazards but requires sustained periods at a computer terminal and with noise associated with a data processing environment. Work is also performed in multiple County locations, buildings and settings. The employee walks between buildings in the downtown Seattle area and is exposed to the general public which can include potentially violent persons. Work may be performed outside metro facilities. Work can be performed in cramped and/or awkward postures.

**The noise level is**

Approximately 40-90 decibels.

The noise is caused by moving traffic and computer equipment.

HCP Initials if Restricted

**Work environment may include the following exposure(s):**

Outside weather: Occasionally

Humidity/dampness: Occasionally

Fumes: Rare

Odors: Rare

Dusts: Rare

Mists: Rare

Moving mechanical parts: Occasionally

Vibration: Occasionally

Working in high, exposed places: Rare

HCP Initials if Restricted


**POTENTIAL MODIFICATIONS TO JOB**

### SIGNATURES

Signatures on this page are obtained before the document becomes available for use and are not required each time the document is reused. Obtained signatures are kept on file at King County Safety & Claims. The Health Care Provider signature section is separate and appears on the following page.

Kyle Pletz, BA, VRC, Vocational Consultant  
Printed name & title of VRC evaluator

\_\_\_\_\_  
Signature of VRC evaluator

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed name & title of contact

\_\_\_\_\_  
Signature of contact

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed name & title of employee

\_\_\_\_\_  
Signature of employee

\_\_\_\_\_  
Date

**HEALTH CARE PROVIDER SECTION**

Check all that apply

The employee is released to perform the described duties without restrictions on performance or work hours as of \_\_\_\_\_.

The employee is released to perform the described duties on a reduced schedule as of \_\_\_\_\_. The recommended schedule is:

Temporary until \_\_\_\_\_  Permanent as of \_\_\_\_\_

The employee is released to perform the described job with the following modifications:

Temporary until \_\_\_\_\_  Permanent as of \_\_\_\_\_

The employee is not released to perform the described duties due to the following job functions:

Temporary until \_\_\_\_\_  Permanent effective \_\_\_\_\_

The employee is unable to work in any capacity.  
A release to work is:  anticipated by \_\_\_\_\_  Not expected

The limitations are due to the following objective medical findings:

\_\_\_\_\_  
Printed or typed name and phone number of Health Care Provider

\_\_\_\_\_  
Signature of Health Care Provider

\_\_\_\_\_  
Date