



POSITION VACANCY NOTICE City of Ketchikan

January 31, 2023

TITLE: TELECOMMUNICATIONS SYSTEMS/SERVER ENGINEER			
DEPARTMENT:	KPU Telecommunications	DIVISION:	Engineering
STATUS:	Regular Full-time	HOURS/DAYS:	Monday – Friday 8:00 AM – 5:00 PM
GRADE / STEP:	982	DUTIES:	See attached job description
MONTHLY SALARY:	\$9,390.53- \$12,647.68 DOQ	UNION STATUS:	NO

SPECIAL REQUIREMENTS:

A Bachelor's degree from an accredited college or university with major course work in electrical engineering or a related field; five years of increasingly responsible telecommunications engineering experience including two years of administrative and supervisory responsibility; possession of, or ability to obtain, an appropriate, valid driver's license.

ADVERTISING REQUIREMENTS

OPEN UNTIL FILLED

PUBLICATIONS: Ketchikan Daily News; Job Service; City Website

APPLICANT PROCESSING INSTRUCTIONS

**FOR APPLICATION AND COMPLETE JOB DESCRIPTION CONTACT:
THE CITY OF KETCHIKAN, 334 FRONT STREET, (907) 228-5631 OR ON-LINE AT
www.ktn-ak.us/jobs**

CITY OF KETCHIKAN IS AN EQUAL OPPORTUNITY EMPLOYER

TELECOMMUNICATIONS SYSTEMS/SERVER ENGINEER

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are **not** intended to reflect all duties performed within the job.*

SUMMARY DESCRIPTION

Under direction, designs, administers, operates, maintains and architects computing systems, and data storage elements with the hyper-converged data environment of the Telecommunications Division. The Telecommunications Engineer Systems/Server is responsible for the operating systems, applications, software integration, and automation of tasks related to the efficient operation of the Telecommunications Division. This includes, but is not limited to software programming and scripting languages necessary to carry out tasks to increase reliability, improve functionality and productivity of the Division.

The Telecommunications Systems/Server Engineer must perform his/her duties in a manner that reflects positively on KPU and the division and is responsible for maintaining a level of professional expertise and image that promotes efficient use of the resources available to the division.

REPRESENTATIVE DUTIES

The following duties are typical for this classification. Incumbents may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

1. Ensure 24/7/365 availability and uptime of the systems computing environment.
2. Manages the day-to-day operations, scalability, and growth of a distributed datacenter environment.
3. Secures, protects and monitors the functioning of the complete computing environment against inside and outside threats and attacks.
4. Provides professional, prompt, courteous and accurate support to customers and staff in the operations of application software, system and tools.
5. Builds automation and production-quality tools to drive efficiencies to business processes, solve operational problems and deliver self-service features to customers.
6. Keeps systems and software in compliance with vendors, local, state, and federal rules and regulations.
7. Administers Windows and Linux operation systems. Builds and directs disaster recovery efforts for those systems.
8. Responsible for maintaining and monitoring for peak applications system, and virtualized datacenter performance.
9. Coordinates with internal staff and stakeholders to deliver easy-to-use clear and robust operational processes and solutions.
10. Works cross functionally as a leader in the deliverance of datacenter business solutions.
11. Diagnose and debug root cause and remediation of all software and system issues and outages.

12. Produces appropriate technical documentation and reports on system performance and on how to maintain software applications and servers to the rest of the division.
13. Ensures compatibility between systems and software to scale and directs outside professional services when necessary to meet those needs.
14. Leverages open-source software and API's when appropriate to build synergies between disparate systems to build operational efficiency in the organization.
15. Collaborates with the network engineering team to drive software-defined networking (SDN) actions to automate decisions about the network.
16. Assist the Marketing/Sales department with efforts to create business growth and opportunity for the division. Translates technical concepts and issues in design discussions with end customers and sales staff.
17. Leads in the creation of RFI/RFP's and other bids to navigate the division in the bringing of new products, services and solutions to KPU Telecommunications in the area of cloud and datacenter solutions.
18. Leads and develops MOP's and maintenance windows to drive hyper-converged infrastructure projects to their completion.
19. Trains staff in the administration, operation, and maintenance of hypervisor, disaster recovery software, systems, software, and tools.
20. Performs other related duties as required.

QUALIFICATIONS

The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.

Knowledge of:

Operating Systems including but not limited to: Red Hat, CentOS, SuSe Debian, Microsoft Server (2008-2016).
 Scripting Languages PHP, Perl, and Bash.
 System Security tools such as iptables and windows firewall.
 Operating system hardening.
 Intermediate SQL query scripting
 Installation, setup and management of SQL Databases; MSSQL, my sql/Maria DB, Oracle and PostgreSQL,
 Windows Active Directory and LDAP
 DNS – Bind 8 or 9 in ISP environments.
 DHCP w/Option-82 implementation.
 IPTV Broadcast principles, codecs, and streaming methods
 IPTV middleware operation and maintenance experience
 vmWare tm Vsphere, Vcenter, ESXi 5.5 to current architecture, design and administration.
 SAN/NAS setup, management, and deployment, iSCSI and Fiber Channel (FC).
 Dell tm VSAN administration.
 Delol tm Equallogic administration
 Cisco tm /UCS installkation and administration
 Network Health and SNMP monitoring tools such as Solorwinds, MRTG, Splunk
 Ls/L3 switch design and management.

Cisco Broadworks/Taqua T7000 softswitches.

SIP (Session Initiation Protocol)

Telecommunications technical-vernacular terminology to sufficiently communicate, delegate, and coordinate unresolved and/or advanced service installation and repair issues between departments.

Telecommunications service provisioning process and automation.

Ability to:

Coordinate with Tier 2 level technical and customer support to diagnose and repair customer issues.

Delegate and coordinate complex service installations and repairs between departments.

Lead the activities of subordinate support staff and be a point of escalation in the resolution of unresolved service tickets and complex service orders.

Understand and respond to user questions in an effective and courteous manner.

Analyze and troubleshoot user's problems via the telephone.

Learn and troubleshoot IPTV configurations, corresponding equipment and troubleshooting tools such that tools can be built to maximize the effectiveness of support technicians.

Understand, interpret and apply general and specific administrative and departmental policies and procedures in the computer center environment.

Exercise tact and judgment in responding to inquiries and resolving complaints and problems.

Maintain record and reports on the performance of the hyper converged environment, system, and software.

Work calmly under steady pressure and calm with frequent interruptions and a high degree of public contact to drive a customer focused environment.

Work and excel in a team environment.

Convey and translate complex technical procedures and directions to customers in layman's terms.

Exercise judgment and situational reasoning ability.

Use functional reasoning and apply rational judgement in performing diversified work activities.

Keep abreast of the latest industry standards in the areas of software-defined networks and hyper-convergence.

Communicate clearly and concisely both orally and in writing.

Establish and maintain effective working relationships with outside partners, vendors, and consultants.

Education and Experience Guidelines - *Any combination of education and experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:*

Education/Training:

A Bachelor's degree from an accredited college or university with major course work in electrical engineering or a related field.

Experience:

Five years of increasingly responsible telecommunications engineering experience including two years of administrative and supervisory responsibility.

License or Certificate:

Possession of, or ability to obtain, an appropriate, valid driver's license.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

The conditions herein 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 job functions.

Environment: Work is performed primarily in a standard office setting; extensive public contact. Regular interaction with telecommunications personnel, state and federal agencies, manufacturers

and vendors; occasional interaction with telecommunications subscribers and professional engineering and consulting firms.

Physical: Primary functions require sufficient physical ability and mobility to work in an office setting; to stand or sit for prolonged periods of time; to occasionally stoop, bend, kneel, crouch, reach, and twist; to lift, carry, push, and/or pull light to moderate amounts of weight; to operate office equipment requiring repetitive hand movement and fine coordination including use of a computer keyboard; and to verbally communicate to exchange information.

Vision: See in the normal visual range with or without correction.

Hearing: Hear in the normal audio range with or without correction.

Grade: 982

Union: No

FLSA: Exempt

Date Approved: August 2019

Human Resources Manager Approval

City Manager Approval