

JOB DESCRIPTION

Job Title: Train Control Network Engineer

FLSA Status: Exempt

Salary Grade: 9

PURPOSE OF POSITION

The Train Control Network Engineer, will support the implementation of the organization's technology plan, including current and future technology needs and as aligned to business strategies and planning needs; administer this plan and manage the resulting technical infrastructure. The position requires the ability to translate functional requirements into technical solutions, establish formal support and performance agreements and plans, and meet business objectives through the implementation and support of appropriate technical solutions.

DISTINGUISHING CHARACTERISTICS

This job description is not part of a job series.

SUPERVISION EXERCISED AND RECEIVED

- Receives supervision from departmental management/supervisory level roles
- No formal supervisory responsibilities

ESSENTIAL DUTIES AND RESPONSIBILITIES

The duties listed below are intended to describe the general nature and level of work being performed and are not to be interpreted as an exhaustive list of responsibilities.

- Coordinate the design, administration, operations, and support of train control systems and infrastructure to achieve established availability and service levels.
- Work with the Communication and Signal contractor technicians performing day to day routine maintenance and troubleshooting under railroad back office systems maintenance service contract.
- Design, update, and support the SCRRRA Train Control network of Cisco routers and switches.
- Conduct research on emerging railroad control technologies in support of infrastructure development efforts, and recommend technologies that will increase cost effectiveness and infrastructure flexibility.
- Assist in the installation and testing of new desktop components, new applications, operating systems and upgrades to ensure compatibility with overall train control networking operations.
- Coordinating research and resolution of network and PC performance problems for PTC.
- Plan and write reports, memorandums, and instructional manuals as documentation of PTC operating system and application configurations.
- Collaborate with Information Technology to determine needs for upgrading PC's and other network components for PTC.
- Plan for and perform disaster recovery drills at all PTC work locations.
- Assist department staff with an accurate inventory of all hardware and software release levels for PTC.
- Assist in identifying, evaluating and managing third party vendors, technology or processes for PTC and integrating with SCRRRA technology and equipment.
- Develop and track PTC project schedules and coordinate and facilitate activities and commitments with other departments and/or functions.



- Monitor security measures, ensuring security breaches do not occur and ensure the PTC network is properly protected by assisting in developing secure architectures.
- Resolve complex technical issues and respond immediately to problems involving other departments as necessary.
- Monitor trends and determine actions necessary to eliminate future occurrences.
- Monitor and analyze the PTC network performance, detecting operational problems and recommend improvements.
- Make recommendations to management on enhancements that improve quality and reliability of the PTC network.
- The responsibilities outlined above are representative of the role but not exhaustive. Additional duties may be assigned as needed, and reasonable accommodations will be provided to qualified individuals with disabilities in accordance with applicable laws.

MINIMUM QUALIFICATIONS

Education and Experience

- Bachelor's Degree in Computer Engineering, Computer Science, Network Engineering or a closely related technical field.
- Minimum of five (5) years of work experience as a Network Engineer performing similar job duties as described in the position duties above.
- Prior work experience with complex operations systems/software such as dispatch, enterprise management, or other mission critical systems or software.
- Working knowledge of freight and passenger rail operating environment, FRA regulations and GCOR, freight and passenger train control systems and qualify on GCOR within 12 months.
- A valid Class "C" California driver's license with a satisfactory driving record of no more than two moving violations and no DUIs within the last three years

Preferred Qualifications

None

Knowledge, Skills, and Abilities

Knowledge of:

- Other railroad or light rail train control systems such as Wabtec, Ansaldo, Alstom or ARINC AIM CAD.
- Wabtec BOS and Network Management Systems such as Solarwinds.
- Advanced knowledge of network traffic routing protocols/technologies used in routers from Cisco such as EGP, BGP, IGRP, EIGRP, OSPF.
- Advanced understanding of operational systems and architectures (including workstations, servers, networks) at a level appropriate to design, troubleshoot, and maintain such systems as a second-tier responder for PTC.

Skilled in:

- Recognize, trouble shoot, and resolve technical and/or operational issues as related to PTC.
- Organize and prioritize tasks in most effective ways to achieve PTC operational goals.
- Excellent verbal and written communications skills including ability to create effective reports and presentations to communicate required information.



- Proven track record and experience working successfully in a high-pressure work environment (making appropriate decisions, understanding potential impacts, and taking responsibility).

Ability to:

- Demonstrated ability to support VMWare server host servers and virtual machines in a networked architecture.
- Demonstrated ability to gather, assess, prioritize and analyze information from various sources in order to make good operational decisions for PTC.
- Demonstrated ability to work both independently and within multidisciplinary teams including management, operations, and technical support staff.

PHYSICAL REQUIREMENTS

- Transition between a stationary position at a desk or work location and move about Metrolink facilities or other work site locations
- Operate tools to perform the duties of the position, such as computers, office equipment, and work-related machinery
- Transport equipment or boxes up to 25 lbs
- Exchange ideas by means of communication
- Visual acuity to detect, identify, and observe employees or train movement and any barriers to movement when working on or near railroad tracks
- Hear and perceive the nature of sounds when working on or near railroad tracks
- Balance, ascend/descend, climb, kneel, stoop, bend, crouch, or crawl within assigned working conditions and or locations

Working Conditions

Position requires work in a normal office environment with little exposure to excessive noise, dust, or temperature. Work may also be conducted in outdoor environments, at construction sites, Railroad Track and Right-of-Way environments, and warehouse environments, with possible exposure to individuals who are hostile or irate, moving mechanical parts, and loud noises (85+ decibels, such as heavy trucks, construction, etc.)

Southern California Regional Rail Authority is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, the Authority will provide reasonable accommodations to qualified individuals with disabilities and encourages both prospective and current employees to discuss potential accommodations with the employer.

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