

JOB DESCRIPTION

Job Title: IT Architect II
Working Title: IT Architect II, Train Control Systems
FLSA Status: Exempt
Salary Grade: 10

PURPOSE OF POSITION

The IT Architect II, Train Control Systems, will interface with various railroad operating groups to ensure that all aspects of the Train Control Systems including CAD, BOS, Signal and PTC On-Board are current and comply with railroad operating practices, policies and promote safe and efficient railroad operations. This person will be responsible for lab testing critical Train Control subsystems including critical features, wayside communication systems, PTC SUBDIV database files and various components of the PTC data model. Additionally, this person will participate in the long-term development of next generation train control projects.

DISTINGUISHING CHARACTERISTICS

This job description is not part of 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.

- Ensure the incorporation and application of railroad operating practices and policies into the Network Control system including CAD, PTC, and Signal Systems provided for the safe and efficient operation of the railroad.
- Provide in-depth problem analysis and resolution for all Train Control supported servers' data telecommunications, networks, and endpoint computer systems.
- Perform and lead technology build, test and development/reporting activities.
- Assess operating practices and governing operations and assure the Train Control, PTC, Signal Communications and Network Control Systems reflect industry best practices.
- Provide on-going maintenance, including upgrades and hot fixes.
- Provide technical and end-user documentation for Train Control server architecture and procedures.
- Collaborate with the project management team, technical team, and business unit to build server solutions.
- Design and analyze issue resolution, bypass, and recovery procedures Acts as a technical liaison and partner to applications, systems programmers and computer operations for network related areas.
- Present cost-effective recommendations to improve the current computing systems and teleprocessing networks to various stakeholders.
- Plan, install, implement, upgrade and test a variety of servers to be used within Train Control Standard Operating Procedures in user groups for new products, procedures, training, and policies.



- Produce reports, graphs and charts as needed for Train Control procedures, training, and documentation.
- Evaluate and interpret statistical data reports as generated within SCRRRA and management.
- Flexible work environment including occasional night, weekend duty assignments and provide on-call support when applicable.
- 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 Information Systems, Business Information Systems or related field.
- A minimum of seven (7) years of work experience in data center infrastructure solutions delivery role, and experience with business process components, module integration, and business customer facing engagements.
- A minimum of three (3) years of work experience testing and reviewing logs from various train control systems.
- Experience in an active freight or commuter railroad GCOR/FRA regulated environment (as a dispatcher, administrator, train systems operator or signal and communications back office support).
- A combination of training, with a minimum of an Associate Degree and/or experience that provides the required knowledge, skills, and abilities, may be considered when determining minimum qualifications. Advanced relevant coursework may also substitute for a portion of the required experience.

Preferred Qualifications

None

Knowledge, Skills, and Abilities

Knowledge of:

- Train control software and hardware contracts with payment schedules featuring unit price, lump-sum, RFP, and design-build.
- GCOR and Timetable experience (preferred but not required).
- Principles, methods, or tools for developing, scheduling, coordinating, and tracking projects and resources, including monitoring and inspecting work, and contractor performance.
- Best practices to document Root Cause Analysis and ongoing system documentation.
- Technical and analytical processes required to support and troubleshoot complex issues in an enterprise environment including deep working knowledge of VMware, PRTG, Veeam, Windows Servers and Active Directory.
- Train control, signal and communication configuration management practices and regulatory record keeping.
- Track, railroad operations, and signaling and communication systems.
- Project life-cycle management.
- Disaster Recovery and testing policies and procedures.



Skilled In:

- Problem-solving and issue resolution while considering end users' needs.
- Process workflow and SOP redesign.
- Effective communication skills both verbally and in writing.

Ability to:

- Support projects at various levels within the enterprise.
- Analyze and troubleshoot at the hardware, Operating Systems, and Firmware level and articulate outcomes.
- Communicate effectively and efficiently with internal and external customers.
- Document and create diagrams of current infrastructure.
- Collaborate with other SCRRRA departments.
- Lead and facilitate meetings.

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.

Last Updated: October 2025

