

**POSITION DUTY STATEMENT**

PM-0924 (REV 7/2014)

CLASSIFICATION TITLE Systems Software Specialist III (Technical)	OFFICE/BRANCH/SECTION HQ IT/Security & Network Services/Network Design	
WORKING TITLE Network Systems Engineer	POSITION NUMBER 900-170-1367-924	EFFECTIVE DATE

As a valued member of the Caltrans team, you make it possible for the Department to provide a safe, sustainable, integrated, and efficient transportation system to enhance California's economy and livability. Caltrans is a performance-driven, transparent, and accountable organization that values its people, resources and partners, and meets new challenges through leadership, innovation and teamwork.

**GENERAL STATEMENT:**

Under the general direction of the Supervisor, Network Operations, a Systems Software Specialist III (Supervisor), the incumbent acts as a technical specialist on network system projects related to the Caltrans Wide Area Network (WAN). The incumbent independently conducts the most complex studies in connection with the analysis design, development, implementation, procurement and support of the Wide Area Network and associated systems. The incumbent will also be responsible for working with other analysts in integrating critical applications into the WAN and implementing wide area network security. Duties include, but are not limited to:

**TYPICAL DUTIES:**

Percentage		Job Description
50%	E	Act as lead network architect, lead technician and team leader for the Caltrans Wide Area Network, which includes design, implementation, integration and maintenance of existing systems. Research, recommend and implement solutions to enhance and/or expand the system to better allow Caltrans to meet its current and future operational goals. Provide documentation on system design and specifications, as well as reports or presentations to management on the existing system and proposed changes to that system.
25%	E	Act as team lead and provide technical expertise in resolving anomalies associated with network devices and network software systems; implementation of network proprietary software. Install, configures and maintains software systems of enterprise network devices such as core routers, switches, firewall devices. Provide documentation on the system that includes, but is not limited to: system design, system requirements, operational requirements, operational procedures, troubleshooting procedures, troubleshooting index of known problems and recommendations for future expansion/enhancements.
15%	E	Performs technological research for network communication devices and their conformance to standards regarding multi-protocol network integration, routing protocols, Open Source Interconnection (OSI) model relationships, and network integration methodologies Performs technology research for network communication devices and their conformance to standards regarding multi-protocol network integration, routing protocols, OSI model relationships, and network integration methodologies. Provide documentation on system design and specifications, as well as reports and presentations to management on the existing system and proposed changes to that system.
10%	M	Acts as a consultant for the Department and external parties on all issues related to supporting and maintaining the Department's Wide Area Network.

<sup>1</sup>ESSENTIAL FUNCTIONS are the core duties of the position that cannot be reassigned.

MARGINAL FUNCTIONS are the minor tasks of the position that can be assigned to others.

**SUPERVISION OR GUIDANCE EXERCISED OVER OTHERS**

The incumbent has no direct supervisory responsibilities. However, the incumbent is expected to have the ability to perform lead person activities as part of a project team or provide technical leadership to junior staff members and/or contract staff as part of a project team.

**KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS**

Knowledge of: Electronic computer operating systems, OSI model, software programming and configuration; electronic

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data processing equipment and its capabilities and interfaces between hardware and software; the requirements of the installation and implementation of the more complex computer software systems.

Ability to: Analyze data and situations, reason logically and creatively, identify problems, draw valid conclusions, and develop effective solutions; apply creative thinking in the design and development of methods of processing data with electronic computers; establish and maintain cooperative relationships with those contacted in the course of the work; work under pressure, speak and write effectively; prepare effective reports; coordinate the activities of technical personnel.

Analytical Requirements: The incumbent must have a level of data processing analytical ability and expertise to permit the employee's exercise of sound judgment in all disciplines from conceptualization through detailed implementation on the most complex system software projects.

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## RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

The incumbent is responsible for decisions, actions, and consequences related to the design, installation, maintenance of the Caltrans wide area communications equipment which provides backbone connectivity for all major information systems that are in use at Caltrans, including Caltrans information systems running at the Office of Information Technology. Continued secure operation of the network is essential to assure that Caltrans personnel have access to mission critical applications and data distributed throughout the State of California.

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## PUBLIC AND INTERNAL CONTACTS

The incumbent will be required to establish and maintain cooperative relationships with those contacted in the course of the work.

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## PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

The incumbent may be required to sit for long periods of time using a keyboard; work in highly intense situation when network failures occur and immediate resumption of services is paramount; deal effectively with pressure, maintain focus, and intensity yet remain optimistic and persistent, even under adversity; adjust rapidly to new situations warranting attention and resolution; develop and maintain cooperative working relationships with clients, staff and co-workers; respond appropriately to difficult situations.

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## WORK ENVIRONMENT

While at their base of operation, employee will work in a climate-controlled office under artificial lighting. The incumbent will be required to work for limited amounts of time in high noise level computer rooms with lower than normal temperatures.

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I have read, understand and can perform the duties listed above. (If you believe you may require reasonable accommodation, please discuss this with your hiring supervisor. If you are unsure whether you require reasonable accommodation, inform the hiring supervisor who will discuss your concerns with the Reasonable Accommodation Coordinator.)

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EMPLOYEE (Print)

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EMPLOYEE (Signature)

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DATE

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I have discussed the duties with, and provided a copy of this duty statement to the employee named above.

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SUPERVISOR (Print)

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SUPERVISOR (Signature)

DATE

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