DUTY STATEMENT

Class Title	Position Number
Information Technology Specialist II, Senior Network Cloud Engineer	802-354-1414-XXX

COI Classification
☐ Yes   ☒ No

Unit

Section
Network Infrastructure Section

Branch
Cloud Business Solutions

Division
Business Operations Technology Services Division (BOTS)

This position requires the incumbent to maintain consistent and regular attendance; communicate effectively (orally and in writing if both appropriate) in dealing with the public and/or other employees; develop and maintain knowledge and skill related to specific tasks, methodologies, materials, tools, and equipment; complete assignments in a timely and efficient manner; and, adhere to departmental policies and procedures regarding attendance, leave, and conduct.

Job Summary: Under general supervision of an Information Technology Manager I (ITM I), the Information Technology Specialist II (ITS II) is responsible for leadership and master level expertise in managing, supporting and administering complex network and cloud enterprise infrastructure for the Department of Health Care Services (DHCS) working in the domains of System Engineering, Information Security, and IT Project Management. The ITS II is responsible for enterprise network services operations including, but not limited to, firewalls, core, distribution and access switches, Wi-Fi, Network Access Control (NAC), network monitoring tools, intrusion detection and prevention systems, Virtual Private Networks (VPN), client VPN, network security systems and cabling, etc. The ITS II performs in a lead capacity on complex network infrastructure projects, network feasibility studies, procurements, design and implementations. The ITS II is responsible for system engineering, architecture, design, configuration and administration of all network and cloud infrastructure for DHCS. The ITS II provides networking expertise to technical staff and consultants who manage, support, maintain, secure and optimize the DHCS network and cloud infrastructure which include but not limited to on-premises network, the Amazon Web Services (AWS) cloud hosting, Azure cloud services, public cloud infrastructure, and Software as a service (SaaS) architecture. The ITS II provides policy level recommendations to DHCS management regarding network architecture modifications and enhancements that will optimize functionality, availability, security and cost efficiency. The ITS II leads and manages large scale and highly complex infrastructure projects, feasibility studies, procurements, designs and improvements to optimze the architecture and security of the DHCS network infrastructure. The ITS II provides oversight and technical expertise to other technicians in identifying, isolating, troubleshooting and resolving the most complex technical issues.

Supervision Received: The ITS II receives broad direction from the Chief of the Network Infrastructure Section, an Information Technology Manager I (ITM I). The ITS II is given broad direction and works independently to analyze issues and develop solutions to technical and business problems. The supervisor provides administrative direction with assignments in terms of broadly defined missions or functions. The ITS II is given substantial technical decision-making and provides recommendations for new projects or technical documentation.

Supervision Exercised: The ITS II has no direct supervision responsibilities. However, the ITS II may lead small to large teams of individuals to accomplish complex assignments. The ITS II provides expert technical guidance and leadership to highly technical staff and consultants to ensure consistent delivery of high quality IT services.

Description of Duties: The ITS II is responsible for leadership and master level expertise in managing, supporting and administering complex enterprise network and cloud services for the DHCS. The duties of the ITS II include, but are not limited to the following:

Percent of Time **Essential Functions**

40% **Network Administration**

1A. The ITS II plans, organizes, and leads the activities of staff responsible for the study, acquisition, design, build, test, implementation, maintenance, and support of the DHCS enterprise network infrastructure and cloud services. The ITS II leads in the research, selection, installation, configuration, and maintenance of network and cloud infrastructure services to support enterprise services. The ITS II provides expert technical leadership in the area of security, network and server connectivity. The ITS II coordinates with program staff, the California Department of Technology (CDT), and business partners in identifying and resolving network and cloud connectivity issues. The ITS II troubleshoots and repairs the most critical and complex level network issues; and collaborates with management, stakeholders, project sponsors, external vendors, partners, and other DHCS technical teams. The ITS II evaluates and recommends new technologies. The ITS II provides technical expertise in the area of emerging technologies, protocols, security, monitoring, and capacity planning.

1B. The ITS II provides leadership and serves as subject matter expert in the administration and support of the department's complex enterprise network infrastructure that provides essential and mission critical business operations. The ITS II possesses a master level of expertise and knowledge in network infrastructure, cloud networks, and network security. The ITS II must maintain a detailed understanding of the DHCS on-premises and cloud network infrastructure environment. The ITS II must be highly knowledgeable and skilled in using new technologies and tools, and provide security best practice for the enterprise network and cloud infrastructure. The ITS II must be highly knowledgeable and skilled in using new technologies and tools, and provide security best practice for enterprise systems and services.

20% **Network Architecture**

2A. The ITS II provides leadership in network design assignments including LAN, WAN, Internet, Intranet and Extranet zones, cloud infrastruture, Wi-Fi, remote access solutions, NAC, intrusion detection and prevention systems and network monitoring and management systems. The ITS II leads in product evaluation, testing and implementation in both test and production environment. The ITS II leads the research and provides technical guidance and recommendations regarding system enhancements and new technologies to DHCS management.

2B. The ITS II provides master level expertise and knowledge in network, security, and cloud technologies, standards and practices, in order to design and enhance the DHCS network and system security. The ITS II has broad understanding of networks and architecture to assist programs in system integration. The ITS II maintains an expert level of technical skills and knowledge of current industry standards and procedures regarding network routing, security standards and practices, operating systems, infrastructure architectures, and troubleshooting procedures. The ITS II has an expert knowledge of advanced network monitoring and troubleshooting tools, firewall rules and routing/switching protocols, etc.

15% **System Architecture**

3A. The ITS II assesses and analyzes business and system requirements for highly complex systems in the enterprise and develops concept papers, plans, budgets, schedules, standards, and policies for medium to large scale projects of department-wide impact. The ITS II meets with other technical staff and management in scheduling resources, developing timelines, and resolving issues. The ITS II prepares documentation, proposals, and justifications, such as feasibility studies, procurement documents, technical specifications, network equipment installation, configuration, etc. The ITS II maintains the standard configurations of network and cloud infrastructure, making changes in response to new products or security initiatives.

3B. The ITS II has an in-depth understanding of DHCS network security standards, architecture and industry practices to develop high level system designs, specifications and documentation to implement complex solutions. The ITS II has extensive project management experience to direct, schedule, and support projects of department-wide scope.

10% **Training and Knowledge Transfer**

4A. The ITS II provides training and knowledge transfer to technicians and LAN Admins regarding high-level network administration, security standards and the use of best practices. The ITS II develops training materials and manuals for operational staff. The ITS II develops training plans, budgets and schedules and provides assistance to business partners in monitoring and improving system performance and provides technical consultation· and support to other programs that want to utilize enterprise services. The ITS II conducts meetings and presentations regarding system design and implementation for management, technical staff and stakeholders to provide an understanding of how the system is built. The ITS II leads, coordinates and communicates between customers, vendors, staff and management to assure that business requirements and timelines are met and costs are within budget. The ITS II reviews and establishes standards and policies aligned with the Department's strategic plan.

4B. The ITS II effectively communicates orally and in writing at all levels of the Department including stakeholders, vendors, customers, managers, staff, and the public. The ITS II must be able to actively lead or participate in conferences, meetings or presentations involving issues of considerable consequence or opposing views and achieve a satisfactory decision or compromised solution.

10%   Documentation

5A. The ITS II must be able to provide highly technical written documentation of complex systems, processes, and procedures with sufficient detail to enable other technical staff to support and maintain the systems that are implemented. The ITS II must have detailed knowledge of all aspects of network and cloud infrastructure. The ITS II must be able to document system architectures, including but not limited to the following: physical and logical designs, hardware and software specifications, network and security requirements, project scope, deliverables, schedules and budgets, system test specifications and results. The ITS II has expert knowledge of all aspects of network and security standards and best practices.

Percent of Time   Marginal Functions

5%   Other Duties

6A. The ITS II performs other duties as required. Occasionally moves and positions objects weighing up to 25 pounds when setting up equipment. This position may be required to work after hours at the discretion of the Section Chief. Some local and overnight travel may be required.

Employee's signature	Date
Supervisor's signature	Date