

Department of Consumer Affairs

Position Duty Statement (Outline)

HR-41a (new 7/2015)

Classification Title Information Technology Specialist I (ITS I)	Board/Bureau/Division Office of Information Services (OIS)
Working Title BI Systems Administrator	Section / Unit / Geographic Location Project Delivery and Information Technology Administrative Services/ Enterprise Reporting & Analytics/ Sacramento
Position Number 610-711-1402-009	Name and Effective Date

General Statement: Under general direction of the Enterprise Reporting and Analytics Supervisor, Information Technology Supervisor II (IT SUP II), the Information Technology Specialist I (ITS I) serve as a Business Intelligence (BI) Systems Administrator. The incumbent independently performs duties related to BI systems installation and configuration, systems maintenance, upgrades, access control, user management, data integration and ETL, and report development. This position is in the System Engineering domain. Duties include, but are not limited to the following:

A. Specific Assignments [Essential (E) / Marginal (M) Functions]

40% Business Intelligence Systems Administration (E)

Provide technical expertise and leadership working independently or in collaboration with other members of the Enterprise Reporting and Analytics team to manage and maintain the infrastructure for the departments various business intelligence tools and applications that enable DCA entities to gather, store, and analyze data to make informed business decisions. Install, configure, and maintain the department's Business Intelligence (BI) tools such as IBM Cognos, Power BI, and Tableau. Implement performance tuning and troubleshooting measures to ensure system reliability and efficiency. Manage user access and permissions and implement security measures that adhere to industry best practices to safeguard both the system infrastructure and data ensuring continuous data confidentiality, integrity, and availability. Configure database connections, monitor system performance, collaborate with DBAs to optimize databases and queries to maintain efficiency and/or improve report performance. Provide technical support and training to BI users, assisting them in the effective use of BI tools. Troubleshoot and resolve issues related to the BI systems, including performance bottlenecks and software errors. Plan and execute system upgrades, including patching and applying updates to software. Stay updated with the latest BI industry trends and technologies, implementing best practices to enhance the BI environment. Continuously seek opportunities to improve the performance and functionality of BI systems.

30% Data Integration and Modeling (E)

Configure IBM Cognos Analytics and Power BI data sources, develop and modify IBM Cognos Framework packages and Power BI data pipelines and semantic models. Determine the various data sources that need to be integrated (e.g., databases, data warehouses, APIs, cloud storage, flat files). Extract data from these sources using ETL (Extract, Transform, Load) tools, custom scripts, or APIs. Remove inaccuracies, duplicates, and inconsistencies in the data. Convert data into a consistent format, which may involve changing data types, applying business rules, and combining data from multiple sources. Standardize data to a common format to ensure uniformity and facilitate easy analysis. Load

transformed data into a target data repository, such as a data warehouse or a data lake. Ensure that the data in the target repository is kept up-to-date with the source data. Validate data to ensure it meets the required quality standards before and after integration. Analyze data to understand its structure, content, and relationships, and identify potential issues. Document data sources, data mapping, transformation rules, and integration processes. Maintain a catalog of metadata to facilitate data discovery and governance. Use automation tools to streamline the data integration process and reduce manual effort.

20% Report Development (E)

Collaborate with stakeholders to understand their reporting needs and translate those needs into technical report specifications. Design, develop, and maintain BI reports and dashboards using IBM Cognos Analytics, Power BI or Tableau. Implement advanced visualizations to represent data effectively. Write complex SQL queries to retrieve data to fulfill ad hoc report request. Conduct thorough testing of reports to ensure accuracy and document report specifications, development process and create user guides.

5% Administration (E)

Provide status reports on project tasks and system development for management. Provide Management presentations as needed. Perform workload analysis, balance, and distribution through use of statistics and products available for informational gathering. Participate in team meetings and recommend actions for continuous team improvement. Maintain awareness of industry trends and emerging technologies and assist with technology planning.

5% Training / Mentoring / Knowledge Sharing (E)

Develop training documents and provide training on new projects and upgrades to Cognos to the appropriate user group. Provide guidance to report developers on report development and issue resolution following the System Development Life Cycle (SDLC) methodology. Share knowledge across the team.

B. Supervision Received

The incumbent works under direction of the Enterprise Reporting and Analytics Supervisor, Information Technology Supervisor II (IT SUP II) and may receive assignments from Information Technology Manager Is and IIs, and the OIS Chief Information Officer (CEA B).

C. Supervision Exercised

None

D. Administrative Responsibility

None

E. Personal Contacts

The incumbent has routine contact with all levels of the DCA staff, consultants, vendors, California Technology Agency staff, Control Agency staff, and other government agencies. This includes DCA's Divisions, Programs, Bureaus, Boards, and Committees including executive management. Contacts may be initiated with other departments, governmental

agencies, and private companies concerning information system and data center technologies as they related to the performance of this position.

F. Actions and Consequences

The incumbent will make decisions that impact the functionality of the DCA technology applications and solutions. Failure to properly administer duties using good judgment, logic, and discretion, may result in poor performance or unusable systems and/or applications, and prevent the DCA end users from effectively performing their duties. In addition, substantial workload backlogs may occur, online consumer services may be unavailable, and the DCA may be unable to carry out mandates designed to protect consumers, licensees, and applicants.

G. Functional Requirements

The incumbent is a Work Week Group E employee and is expected to work an average of 40 hours per week each year and may be required to work specified hours based on the business needs of the office. The incumbent must occasionally move about inside the office to access office machinery. The incumbent must constantly operate a computer and other office productivity machinery, such as a copy machine. The incumbent must be able to remain in a stationary position 50% of the time. The incumbent is required to travel throughout an assigned geographical area by various methods of transportation.

H. Other Information

The ITS I must be able to reason logically and creatively and utilize a wide variety of skills in order to resolve enterprise-wide technical connectivity issues, application development and multiple system interface issues. Additionally, this position must have ability to communicate and resolve business related issues/problems that require a technology solution. Incumbent must be able to develop and evaluate alternatives, research and present ideas and information effectively both orally and in writing. Incumbent must be able to consult with and advise interested parties on IT subjects; gain and maintain the confidence and cooperation of those contacted; accurately assign priorities to multiple projects at any given time and to remain flexible. The incumbent shall operate to protect the cyber security of individual departmental staff, the Department's network and infrastructure, and all data assets.

The incumbent should have a thorough knowledge of the State IT policies and procedures, as mandated in the State Administrative Manual (SAM), Statewide Information Management Manual (SIMM), State IT Policies; as well as basic operational functions of the client agencies: i.e. application review, examination processes, license issuance and denial, complaint handling and enforcement activities. The incumbent must develop a thorough understanding of the OIS services, its operational policies, and procedures to effectively make recommendations and identify the impact of IT initiatives to its customers. Furthermore, the incumbent must develop or possess expert knowledge of the OIS-supported enterprise database systems.

In all job functions, employees are responsible for creating an inclusive, safe, and secure work environment that values diverse cultures, perspectives, and experiences, and is free from discrimination. Employees are expected to provide all members of the public equitable services and treatment, collaborate with underserved communities and tribal governments, and work toward improving outcomes for all Californians.

Title 11, section 703 (d) of the California Code of Regulations requires criminal record checks of all personnel who have access to Criminal Offender Record Information (CORI).

Pursuant to this requirement, applicants for this position are required to submit fingerprints to the Department of Justice and be cleared before hiring. In accordance with DCA's CORI procedures, clearance shall be maintained while employed in a CORI-designated position. Additionally, the position routinely works with sensitive and confidential issues and/or materials and is expected to maintain the privacy and confidentiality of documents and topics pertaining to individuals or to sensitive program matters at all times.

Required Technical Knowledge

- Experience as a systems administrator managing the servers, databases, software applications, access controls, Active Directory, LDAP, troubleshooting, and system patching
- Experience with various O/S such as Windows and Linux/Unix performing complex tasks such as scripting and executing shell commands
- Experience configuring data sources for IBM Cognos and Power BI
- Experience working with APIs and web services to connect different data sources and applications
- Experience working with various Database Management Systems such as Oracle, MySQL, SQL Server, Azure SQL Database, or NoSQL databases such as MongoDB
- Experience writing SQL queries to extract data from various types of DBMS both on-prem or cloud (Oracle, MySQL, MongoDB, Azure, AWS, GCP, etc.)
- Experience in SQL, T/PL SQL, materialized views, triggers, stored procedures, and Python programming
- Experience with ETL, data warehouse and complex data integration
- Experience creating data models, and data pipelines
- Experience with SQL Query optimization and the ability to troubleshoot and optimize complex queries to improve performance
- Experience with various cloud-based BI solutions and services from providers such as AWS and Azure
- Experience creating Power BI measures and calculated columns using DAX functions
- Experience with agile development methodologies, requirements gatherings, code peer review, user acceptance testing, ERD, data flow diagrams and documentation

Additional Performance Expectations:

Ability to effectively communicate both written and verbal
Ability to work efficiently
Ability to report to work on time
Ability to maintain consistent, regular attendance
Ability to work with changing deadlines
Ability to look and act in a professional manner
Ability to work cooperatively and get along with others
Ability to exhibit courteous behavior towards others at all times
Ability to meet deadlines
Ability to perform tasks with minimal amount of errors
Ability to do completed staff work

I have read and understand the duties listed above and I can perform these duties with or without reasonable accommodation. (If you believe reasonable accommodation is necessary, discuss your concerns with the hiring supervisor. If unsure of a need for reasonable accommodation, inform the hiring supervisor, who will discuss your concerns with the Health & Safety analyst.)

Employee Signature

Date

Printed Name

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

Supervisor Signature

Date

Printed Name

Updated: 05/2024