

Ontario-Montclair School District

CLASS SPECIFICATION

Data Warehouse Administrator

GENERAL PURPOSE

Under general direction, performs highly responsible and complex professional and technical tasks in the design, installation and maintenance of enterprise-wide Datamart and Data Warehouse systems, including Business Intelligence (BI), Extract/Transform/Load (ETL), Online Analytical Processing (OLAP), and related software tools for data integration projects for the District; and performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

A Data Warehouse Administrator performs advanced professional responsibilities in the planning, design and implementation of Datamart and Data Warehouse systems needed to efficiently integrate data systems and elements used by a wide variety of customers and stakeholders throughout the organization. The incumbent oversees the design of the data and systems architecture for the data warehouse, including selection of hardware and software products and the development of logical and physical data models, develops ETL scripts, metadata definitions and models, queries and reports, and operations activities. Assignments are given in terms of broad operational or project requirements and performance is measured in terms of overall performance and results.

Data Warehouse Administrator is distinguished from other Information Services staff by the incumbent's overall responsibility for system integration design, development and administration.

ESSENTIAL DUTIES AND RESPONSIBILITIES

The duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to this class. There will typically be an assigned schedule for these duties.

1. Leads, oversees and participates in the design, implementation, installation, upgrading, monitoring and troubleshooting of the District's Datamart and Data Warehouse systems, including servers, storage systems, other device hardware, computer equipment, related peripheral equipment and multi-platform network operating systems and applications.
2. Oversees and participates in the design, implementation, configuration, upgrading, testing, troubleshooting, tuning and maintenance of the data and systems architecture for the Data Warehouse and system integration tools, including the development of logical and physical data models, ETL scripts, metadata definitions and models, queries and reports, and operations activities with expertise in Microsoft SQL, PLSQL and Business Intelligence and ETL tools.
3. Leads, oversees and participates in determining data elements and structures that need to be accessed and extracted, moved and loaded, validated and cleaned, and standardized and transformed; uses data integration tools to support all these processes and make it possible to execute the rules created in the design phase of data warehousing.
4. Provides advanced technical support for the District's network operating systems and applications; troubleshoots and resolves data integration and reporting problems; provides information, technical direction and training to staff on activities required to implement projects, system hardware and software installations and upgrades, new procedures and techniques.

5. Coordinates review of the technical environment to evaluate and measure system performance and effectiveness; utilizes management software and tools to monitor and analyze Datamart and Data Warehouse operations; analyzes capacity and growth requirements and recommends system upgrades and enhancements to meet long-term District needs; develops and recommends specifications for network hardware and software enhancements; develops and recommends data system standards and uses.
6. Maintains and updates schematics and documentation of Datamart and Data Warehouse structures and devices; develops and recommends operational contingency and disaster recovery plans.
7. Reviews new or revised projects for conformance to established technical, system and operational standards; performs application administration duties; designs and ensures the recoverability of lost data through proper and adequate backup and data recovery methods.
8. Coordinates work with other Information Services staff to ensure appropriate system availability to meet end user and operational computing needs.
9. Consult with administration, supervisors, and other users in developing system enhancements, procedures, and problem resolutions.

10. Direct and supervise staff, as assigned.

OTHER DUTIES

1. Participates in the evaluation of proposed solutions by attending demonstrations, performing technical research, providing technical input to evaluative committees and participating in the evaluation process.
2. Provides back-up support to department staff as required.

MINIMUM QUALIFICATION

Knowledge of:

1. Data warehouse and systems architecture, including the development of logical and physical data models including multidimensional data cubes, metadata definitions and models.
2. Principles and practices of Business Intelligence and data integration constructs.
 1. Industry design and configuration standards for data transformation and data warehouse technologies and tools.
 2. Principles and practices of business and technical communications, including techniques in the development of system and user documentation.
 3. Operating principles, parameters, uses, capabilities, characteristics and limitations of servers, network operating systems, PC's, mid-range computers and related equipment.
 4. Standard principles, practices and methods of project management.

Ability to:

1. Develop conceptual frameworks and apply state-of-the-art technology to the design and management of data warehouse and data integration infrastructures.
2. Install, configure, maintain and manage the operations of complex data warehouse systems to achieve optimal technical performance and end user support.
3. Analyze and troubleshoot complex data cleansing, data integration, and data warehouse system

issues, identify the reasons for problems, failures and malfunctions and develop optimal solutions.

4. Monitor data integration and reporting anomalies and make adjustments as required.
5. Perform business and functional analyses and reach sound conclusions regarding customer requirements and efficient, cost-effective systems and technology solutions.
6. Read, interpret and apply complex technical publications, manuals and other documentation.
7. Identify data communication and information management issues and opportunities, analyze problems and alternatives and develop sound conclusions and recommendations.
8. Prepare clear, concise and accurate program documentation, reports of work performed and other written materials.
9. Conscientiously preserve the confidentiality of all proprietary and confidential data and information residing in the District, in accordance with Departmental and District policy and state and federal law.
10. Plan, organize and complete projects efficiently and in accordance with District quality standards, while troubleshooting unexpected system problems.
11. Operate a computer and related equipment.
12. Work cooperatively with customers in a responsive, helpful, courteous and tactful manner.
13. Communicate clearly and concisely, both orally and in writing.
14. Exercise sound independent judgment within general policy guidelines.
15. Establish and maintain effective working relationships other Information Systems team members, managers, administrators, end users and others contacted in the course of work.

Training and Experience:

Graduation from a four-year college or university with a major in computer sciences, management information systems, computer engineering or a related field preferred; and five years of progressively responsible experience in the analysis, design, development and administration of enterprise business intelligence systems, datamarts, or data warehouses; or some combination of education, training and experience that produces the requisite knowledge and ability

Licenses; Certificates; Special Requirements:

Microsoft Certified Solution Developer (MCSD) for Microsoft .NET; Microsoft Certified Data Base Administrator (MCDBA) or Oracle Certified Database Administrator (DBA), or the equivalents are desirable.

A valid California Class C driver's license, a good driving record and the ability to maintain insurability under the District's vehicle insurance policy.

PHYSICAL AND MENTAL DEMANDS

The physical and mental demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Physical Demands

While performing the duties of this class, an employee is regularly required to sit; talk or hear, in person and by telephone; use hands repetitively to finger, handle, feel or operate computers and

other standard office equipment; and reach with hands or arms. An employee is frequently required to walk and stand and occasionally to lift up to 50 pounds.

Specific vision abilities required by this job include close vision and the ability to adjust focus.

Mental Demands

While performing the duties of this class, an employee is regularly required to use oral and written communication skills; read and interpret complex data, information and documents; analyze and solve problems; observe and interpret situations; use math and mathematical reasoning; learn and apply new skills or information; perform highly detailed work on multiple, concurrent tasks; work under changing deadlines with frequent interruptions; work effectively as a team leader or member; and interact with managers, internal customers, employees, vendors, consultants and others encountered in the course of work.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

The employee works under typical office conditions, and the noise level is moderately quiet. The employee is on call 24 hours a day, 7 days a week for the resolution of systems and network problems and issues.

Board Approval: August 23, 2012