

**STATE OF OHIO (DAS)**CLASSIFICATION  
SPECIFICATION**CLASSIFICATION SERIES**

Data Base Analyst

**MAJOR AGENCIES** Administrative Services, Job and Family  
Services, ODOT, Workers' Compensation**SERIES NUMBER**

6415

**EFFECTIVE**  
03/23/2014**SERIES PURPOSE**

The purpose of the data base analyst occupation is to maintain &/or design mainframe computer data bases.

Note: class series is reserved for use for positions involved in data base design & maintenance for mainframe computers only.

**Glossary:** The following terms will be used in the specification and mean the following:

ACB: access control blocks

Database Tool/Utilities: support tool used to determine status of a database (e.g., how full, how fragmented, ensures no broken pointers between records) & to do performance turning (e.g., unloading/re-loading data; restructuring data layout & file sizes).

DBD: data base definitions

Key Worker: employee designated by data base administrator or other supervisory/managerial personnel, by Position Description, to be primarily responsible for design & implementation of data bases ranging in size from small to medium for assigned agency.

Platform: maker/manufacturer of the hardware the data base system runs on (e.g., IBM, Digital); or maker/manufacturer of the hardware the data system runs on & size & processing power of the computer (e. g., IBM mainframe platform, IBM AS400 which is mid-sized).

Project Leader: employee with total responsibility for planning, administering & coordinating all aspects of & activities related to design, implementation of data base systems to be carried out in conjunction with other involved personnel.

PSB: program specification blocks

Relational Data Bases: Small data base system: up to 25 inter-related tables

Medium data base system: 25 but less than 45 inter-related tables

Large data base system: 45-70 inter-related tables

Very large data base system: more than 70 inter-related tables

Hierarchical Data Bases: Small data base system: up to 10 segment types

Medium data base system: 20 but less than 40 segment types

Large data base system: 40 but less than 60 segment types

Very large data base system: more than 60 segment types

**JOB TITLE**

Data Base Administrator 1

**JOB CODE**

64156

**PAY GRADE**

15

**EFFECTIVE**

03/07/2004

**CLASS CONCEPT**

The first supervisory level class works under general or administrative direction & requires extensive knowledge of computer sciences & data base management systems in order to plan & administer all data base management system operations executing under one data base management system product line (e.g., Relational: Supra DBA, DB2 DBA, Oracle DBA; Hierarchical: IMS DBA) & supervise lower-level data base analysts; or to plan & administer all activities related to operations of medium to large & complex data base system & supervise lower-level data base analysts.

**JOB TITLE**

Data Base Administrator 2

**JOB CODE**

64157

**PAY GRADE**

16

**EFFECTIVE**

12/15/1991

**CLASS CONCEPT**

The second supervisory level class works under general direction & requires extensive knowledge of computer science & data base management systems in order to plan & administer all data base mainframe computer systems operations executing under multiple data base management systems across entire hardware platform (e.g., IBM, DBA, Digital DBA) & supervise lower-level data base administrators &/or high level data base analysts; or to plan & administer all activities related to design, implementation & maintenance of very large & complex data base system & supervise data base analysts.

**JOB TITLE**

Data Base Administrator 3

**JOB CODE**

64158

**PAY GRADE**

17

**EFFECTIVE**

12/15/1991

**CLASS CONCEPT**

The third supervisory level class works under administrative direction & requires extensive knowledge of computer science in order to plan & administer all data base mainframe computer systems operations executing under multiple data base management systems & supervise one or more data base administrators.

| <u>JOB TITLE</u>          | <u>JOB CODE</u> | <u>B. U.</u> | <u>EFFECTIVE</u> | <u>PAY GRADE</u> |
|---------------------------|-----------------|--------------|------------------|------------------|
| Data Base Administrator 1 | 64156           | EX           | 03/07/2004       | 15               |

**JOB DUTIES IN ORDER OF IMPORTANCE (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)**

Plans, administers & coordinates all data base management system operations (e.g., determines time, cost & personnel estimates for all new data base applications, existing data base maintenance & associated programs; develops & maintains standards for design, data base security, backup & recovery procedures & naming conventions; analyzes all new computer systems for feasibility of data base utilization; evaluates systems for efficiency; participates in long term planning relative to resources needs & in making budget recommendations) executing under one data base management system product line (e.g., Relational : Supra DBA, DB2 DBA, Oracle DBA; Hierarchical: IMS DBA) & supervises lower-level data base analysts; or plans, administers & coordinates all activities related to operation of medium to large & complex data base system & supervises lower-level data base analysts.

Approves logical & physical location of all data base records & ensures available storage for systems; collects & monitors statistics on system usage & growth & processing efficiency; provides technical assistance & consultation to programming & system analysis staff &/or other users; reviews & analyzes all technological advances in data base industry; confers with data base management system software vendors on data base/programming problems; coordinates implementation of data bases &/or changes in on-line systems with Ohio Data Network; works with other personnel to establish/maintain all data definitions (i.e., computerized &/or manual) in organization; assists in analysis & implementation of data base training; assists in analysis/purchase of data base software/hardware & manuals.

**MAJOR WORKER CHARACTERISTICS**

Knowledge of supervisory principles/techniques\*; budgeting\*; computer science; one or more data base management systems & their programming on one hardware platform depending upon specifics of position, with skill level commensurate to size of systems noted in job duties; COBOL &/or other high-level programming language; systems analysis & design. Skill in operation of computer terminal. Ability to deal with large number of variables & determine specific course of action; comprehend variety of complex technical material; communicate verbally & in writing on technical & non-technical material; move hands/fingers easily to operate computer terminal; establish friendly atmosphere as unit/section supervisor.

(\*)Developed after employment.

**MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT**

Completion of undergraduate core program in computer science or associate degree in computer information science; 6 yrs. exp. in systems analysis & design & computer programming using COBOL &/or other high-level programming language, of which 18 mos. was at team/project leader.

-Or completion of undergraduate core program in computer science or associate degree in computer information science; 3 yrs. exp. in design & maintenance of data base management system executing on one platform, of which 18 mos. was as team/project leader; 18 mos. exp. in computer programming using COBOL &/or other high-level languages.

-Or 24 mos. exp. as Data Base Analyst 3, 64153.

-Or 12 mos. exp. as Data Base Analyst 4, 64154.

-Or equivalent of Minimum Class Qualifications For Employment noted above.

**TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT**

Not applicable.

**UNUSUAL WORKING CONDITIONS**

May involve operation of computer terminal for long periods of time; requires significant amount of overtime often under high stress, rushed conditions.

| <u>JOB TITLE</u>          | <u>JOB CODE</u> | <u>B. U.</u> | <u>EFFECTIVE</u> | <u>PAY GRADE</u> |
|---------------------------|-----------------|--------------|------------------|------------------|
| Data Base Administrator 2 | 64157           | EX           | 12/15/1991       | 16               |

**JOB DUTIES IN ORDER OF IMPORTANCE (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)**

Plans, administers & coordinates all data mainframe computer systems operations executing under multiple data base management systems across entire hardware platform (e.g., IBM, DBA, Digital DBA) & supervises lower-level data base administrators &/or high level data base analysts; or plans, administers & coordinates all activities related to design, implementation & maintenance of very large & complex data base system & supervises lower-level data base analysts (e.g., for both options, approves data base designs of staff; estimates time, cost & personnel requirements for new data base applications & existing maintenance modifications; participates in long term planning relative to system needs & procurements; prepares budget & develops data base procedures, policies & standards; develops & maintains standards for data base programming & other technical procedures; approves logical & physical location of all data base records & ensures available storage for system; collects & monitors statistics on system usage, growth & efficiency; analyzes designs of new computer systems for potential data base utilization).

Provides technical assistance & consultation to programming & system analysis personnel &/or other users; coordinates implementation of data bases &/or changes to on-line systems with Ohio Data Network personnel; responsible for product installation, system upgrades & maintenance if assigned; participates in meetings & system design reviews or acts as presenter in such; confers with data base management system software vendors on data base/programming problems; works with other personnel to establish/maintain all data definitions (i.e., computerized &/or manual) in organization; assists in analysis & implementation of data base training; assists in analysis/purchase of data base software/hardware & manuals.

**MAJOR WORKER CHARACTERISTICS**

Knowledge of supervisory principles/techniques\*; budgeting\*; computer science; one or more data base management systems & their programming on one hardware platform depending upon specifics of position, with skill level commensurate to size of systems noted in job duties; COBOL &/or other high-level programming language; systems analysis & design. Skill in operation of computer terminal. Ability to deal with large number of variables & determine specific course of action; comprehend variety of complex technical material; communicate verbally & in writing on technical & non-technical matters; move hand/fingers easily to operate computer terminal; establish friendly atmosphere as section supervisor.

(\*)Developed after employment.

**MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT**

Completion of undergraduate core program in computer science or associate degree in computer information science; 7 yrs. exp. in systems analysis & design & computer programming using COBOL &/or other high-level programming language, of which 2 yrs. was as team/project leader.

-Or completion of undergraduate core program in computer science or associate degree in computer information science; 4 yrs. exp. in design & maintenance of data base management system executing under one platform, of which 2 yrs. was at team/project leader; 2 yrs. exp. in computer programming using COBOL &/or other high-level languages.

-Or 3 yrs. exp. as Data Base Analyst 3, 64153.

-Or 2 yrs. exp. as Data Base Analyst 4, 64154

-Or 12 mos. exp. as Data Base Analyst 5, 64155.

-Or 12 mos. exp. as Data Base Administrator 1, 64156.

-Or equivalent of Minimum Class Qualifications For Employment noted above.

**TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT**

Not applicable.

**UNUSUAL WORKING CONDITIONS**

May involve operation of computer terminal for long periods of time; requires significant amount of overtime often under high stress, rushed conditions.

| <u>JOB TITLE</u>          | <u>JOB CODE</u> | <u>B. U.</u> | <u>EFFECTIVE</u> | <u>PAY GRADE</u> |
|---------------------------|-----------------|--------------|------------------|------------------|
| Data Base Administrator 3 | 64158           | EX           | 12/15/1991       | 17               |

**JOB DUTIES IN ORDER OF IMPORTANCE (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)**

Plans, administers & coordinates overall data base mainframe computer system operations executing under multiple data base management systems & supervises one or more lower-level data base administrators (e.g., approves data base designs of staff; estimates time, cost & personnel requirements for new data base applications & existing maintenance modifications; oversees long term planning relative to system needs & procurements; prepares & oversees preparation of budget & develops data base procedures, policies & standards; develops & maintains standards for data base programming & other technical procedures; approves logical & physical location of all data base records & ensures available storage for systems; collects & monitors statistics on system usage, growth & efficiency; analyzes designs of new computer systems for potential data base utilization; has final authority for data base administration aspects of evaluation & installation of CASE tools & other data base administration support tools; develops data base procedures, policies & standards which affect wide range of computer operators).

Provides technical assistance & consultation to programming & system analysis personnel &/or other users; coordinates implementation of data bases &/or changes to on-line systems with Ohio Data Network personnel; responsible for product installation, system upgrades & maintenance if assigned; participates in meetings & system design reviews or acts as presenter in such; confers with data base management system vendors on data base/programming problems; works with other personnel to establish/maintain all data definitions (i.e., computerized &/or manual ) in organization; assists in analysis & implementation of data base training; assists in analysis/purchase of data base software/hardware & manuals.

**MAJOR WORKER CHARACTERISTICS**

Knowledge of supervisory principles/techniques; budgeting\*; computer science; one or more data base management systems & their programming on one or more hardware platforms depending upon specifics of position, with skill level commensurate to size of systems noted in job duties; COBOL &/or other high-level programming language; systems analysis & design. Skill in operation of computer terminal. Ability to deal with large number of variables & determine specific course of action; comprehend variety of complex technical material; communicate verbally & in writing on technical & non-technical material; move hands/fingers easily to operate computer terminal; establish friendly atmosphere as overall data base administrator.

(\*)Developed after employment.

**MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT**

Completion of undergraduate core program in computer science or completion of associate degree in computer information science; 8 yrs. exp. in systems analysis & design & computer programming using COBOL &/or other high-level programming language, of which 2 yrs. Was as team/project leader; 6 mos. trg. or 6 mos. exp. in supervisory principles/techniques.

-Or completion of undergraduate core program in computer science or completion of associate degree in computer information science; 5 yrs. exp. in design & maintenance of data base management system executing under one platform, of which 2 yrs. was as team/project leader; 2 yrs. exp. in computer programming using COBOL &/or other high-level languages; 6 mos. trg. or 6 mos. exp. in supervisory principles/techniques.

-Or 3 yrs. exp. as Data Base Administrator 1, 64156.

-Or 24 mos. exp. as Data Base Administrator 2, 64157.

-Or 12 mos. exp. as Data Base Analyst 5, 64155; 24 mos. trg. or 24 mos. exp. in management & supervisory principles/techniques.

-Or equivalent of Minimum Class Qualifications For Employment noted above.

**TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT**

Not applicable.

**UNUSUAL WORKING CONDITIONS**

May involve operation of computer terminal for long periods of time; requires significant amount of overtime often under high stress, rushed conditions.