

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

Systems Programmer

SERIES NO.:

6419

MAJOR AGENCIES:

All Agencies

EFFECTIVE DATE:

04/22/2012

SERIES PURPOSE:

The purpose of the systems programmer occupation is to maximize response time & overall system performance of mainframe computers.

At the two lower-levels, incumbents learn technical nuances of mainframe environment, do VSAM tuning & assist installation & modification of system software packages, or assist in investigation of software packages & maintain & enhance existing software packages.

At the supervisory levels, incumbents supervise systems programmers assigned to one unit in an agency that handles much of its own systems programming somewhat independently while in conjunction with DAS' Ohio Data Network or those having smaller & less complex computer systems, or supervise systems programmers assigned to one unit in agency with systems programming that spans across various agencies or those with very large & complex computer systems respectively.

CLASS TITLE:

Systems Programmer 1

CLASS NUMBER:

64191

EFFECTIVE DATE:

02/15/1998

CLASS CONCEPT:

The developmental level class works under immediate supervision & requires working knowledge of computer science, operating systems programming & job control language in order to learn technical nuances (i.e., effect one software product has on another or upon system as whole) of mainframe environment, do VSAM (i.e., Virtual Storage Access Method) tuning (e.g., review statistics to determine performance of VSAM files; recognize indications that files are becoming inefficient & take appropriate measures; resolve problems with files; reorganize VSAM files; change setting of parameters effecting distribution of records with file & determine most optimal placement of files on system) & assist in installation & modification of system software packages.

CLASS TITLE:

Systems Programmer 2

CLASS NUMBER:

64192

EFFECTIVE DATE:

02/15/1998

CLASS CONCEPT:

The full performance level class works under general supervision & requires considerable knowledge of computer science & operating systems programming in order to assist in investigation of various software packages under guidance & direction of more senior systems programmers &/or supervisor, develop interfaces (i.e., communication links between/among computer applications after installation in order for data to be shared) & maintain & enhance existing software packages (e.g., resolve problems by applying vendor supplied fixes or develop internal resolutions).

CLASS TITLE:

Systems Programmer Supervisor 1

CLASS NUMBER:

64195

EFFECTIVE DATE:

07/26/1998

CLASS CONCEPT:

The first supervisory level class works under general direction & requires extensive knowledge of computer science & operating systems programming in order to supervise systems programmers assigned to one unit in agency that handles much of its own systems programming somewhat independently, but in conjunction with Ohio Data Network or in agency with smaller less complex computer systems.

CLASS TITLE:

Systems Programmer Supervisor 2

CLASS NUMBER:

64196

EFFECTIVE DATE:

07/26/1998

CLASS CONCEPT:

The second level supervisory class works under general direction & requires extensive knowledge of computer science & operating systems programming in order to supervise systems programmers assigned to one unit in agency that has very large, complex computer systems or responsibilities span various other customer agencies (e.g., state agencies &/or county agencies).

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| CLASS TITLE: Systems Programmer 1 | CLASS NUMBER: 64191 | BARGAINING UNIT: 14 |
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EFFECTIVE DATE:

02/15/1998

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.)

Learns technical nuances of mainframe environment, does VSAM tuning & assists in installing, testing & maintaining operating system software on mainframe computer in order to maximize computer response time & to enhance overall system performance (i.e., participates in pre-installation planning; reads technical computer systems/software manuals & guides; performs regression testing; monitors hardware performance as result of software changes; evaluates vendor software releases; restores system following massive software or hardware failures; maintains system security).

Provides technical assistance to management & system users; identifies, analyzes & resolves software problems associated with teleprocessing applications; trains programmers & computer operations personnel in use of software & hardware; analyzes system &/or region dumps/error messages.

Writes exit routines &/or programs to interact with system software; recommends programming & operating standards to aid in optimum software/ hardware performance; prepares system performance & usage reports; makes back-up copies of system software data to be used in system recovery; confers with network administrators in design & maintenance of network operating systems; analyzes, designs & implements data communication services as element of overall operating system design.

MAJOR WORKER CHARACTERISTICS:

Knowledge of computer science; computer hardware & peripheral equipment; functions & capabilities of software systems; computer programming; software & related hardware systems; job control & report-generating languages. Ability to read & understand variety of technical material related to computer software & related hardware systems; define problems, collect data, establish facts & draw valid conclusions; communicate verbally on technical matters; move limbs/fingers easily to operate computer terminal.

(*)Developed after employment.

MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:

Completion of undergraduate core program in computer science which included study in Assembler, REXX, Clist & COBOL languages; 12 mos. trg. or 12 mos. exp. in Job Control Language; 3 mos. trg. or 3 mos. exp. in software installation & maintenance for mainframe operating systems.

-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:

Work involves operation of computer terminal for long periods of time.

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| <u>CLASS TITLE:</u> Systems Programmer 2 | <u>CLASS NUMBER:</u> 64192 | <u>BARGAINING UNIT:</u> 14 |
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EFFECTIVE DATE:

02/15/1998

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.)

Assists in investigation of various software packages with some guidance & direction from more senior systems programmer or supervisor, develops interfaces, & installs, tests & maintains operating system software on mainframe computer in order to maximize computer response time & to enhance overall system performance (i.e., participates in pre-installation planning; reads technical computer systems/software manuals & guides; performs regression testing; installs new software packages/upgrades; monitors hardware performance as result of software changes; evaluates vendor software releases; restores system following massive software or hardware failures; maintains system security).

Provides technical assistance to management & system users; identifies, analyzes & resolves software problems associated with teleprocessing applications; contacts vendor representatives to resolve system problems; trains programmers & computer operations personnel in use of software & hardware; analyzes system &/or region dumps/error messages; confers & coordinates with network administrators in design & maintenance of network operating systems; analyzes, designs & implements data communication services as elements of overall operating system design.

Writes exit routines &/or programs to interact with system software; recommends programming & operating standards to aid in optimum software/hardware performance; prepares system performance & usage reports.

MAJOR WORKER CHARACTERISTICS:

Knowledge of computer science; computer hardware & peripheral equipment; functions & capabilities of software systems; computer programming; job control & report-generating languages; software & related hardware systems. Ability to read & understand variety of technical material related to computer software & related hardware systems; define problems, collect data, establish facts & draw valid conclusions; communicate verbally on technical matters; move limbs/fingers easily to operate computer terminal.

(*)Developed after employment.

MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:

Completion of undergraduate core program in computer science which included study in Assembler, REXX, Clist & COBOL languages; 12 mos. trg. or 12 mos. exp. in software installation & maintenance for mainframe operating systems;

-Or 12 mos. exp. as Systems Programmer 1, 64191.

-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:

Work involves operation of computer terminal for long periods of time.

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| CLASS TITLE: Systems Programmer Supervisor 1 | CLASS NUMBER: 64195 | BARGAINING UNIT: EX |
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EFFECTIVE DATE:

07/26/1998

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.)

Supervises systems programmers, assigned to one unit, involved in installation, testing & maintenance of operating system software on mainframe computer, in agency that handles much of its own systems programming independently, but in conjunction with Ohio Data Network or in agency with smaller, less complex computer systems, assigns & prioritizes work, trains staff, monitors & evaluates work performance, assists staff resolve difficult systems problems & develops & enforces systems programming policies, procedures & standards.

Analyzes system performance, prepares system performance & usage reports & maintains records of problems; recommends hardware & software system upgrades or enhancements to management personnel; schedules installations of new system software; documents network start-up, shut-down & operations procedures.

Installs, tests & maintains operating system software on mainframe computer; monitors security procedures; monitors computer room environment & maintenance of hardware.

Provides technical assistance to management & system users; identifies, analyzes & resolves software problems associated with teleprocessing applications; contacts vendor representatives to resolve system problems; attends management meetings &/or vendor schools.

MAJOR WORKER CHARACTERISTICS:

Knowledge of supervisory principles/techniques*; employee training & development*; computer science; computer hardware & peripheral equipment; functions & capabilities of software systems; computer programming; software & related hardware systems. Ability to read & understand variety of technical material related to computer software & related hardware systems; define problems, collect data, establish facts & draw valid conclusions; communicate verbally on technical matters; more limbs/fingers easily to operate computer terminal.

(*)Developed after employment.

MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:

Completion of undergraduate core program in computer science which included study of Assembler, REXX, Clist & COBOL languages; 3 yrs. trg. or 3 yrs exp. in software installation & maintenance of mainframe operating systems; 6 mos. trg. or 6 mos. exp. in employee training & development.

-Or 6 mos. exp. as Systems Programmer 4, 64194.

-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:

Work involves operation of computer terminal for long periods of time.

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| CLASS TITLE: Systems Programmer Supervisor 2 | CLASS NUMBER: 64196 | BARGAINING UNIT: EX |
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EFFECTIVE DATE:

07/26/1998

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.)

Supervises systems programmers involved in installation, testing & maintenance of operating system software & other third party software on mainframe computers in agency that has very large, complex computer systems or responsibilities span in support of customer agencies (e.g., state agencies &/or county agencies), assigns & prioritizes work, trains staff, monitors & evaluates work performance, assists staff in resolving difficult systems problems, & develops & enforces systems programming policies, procedures & standards.

Determines software appropriate to specific customer requirements; analyzes system performance considering cross agency applications; prepares system performance & usage reports & maintains records of problems; recommends hardware & software systems upgrades or enhancements to management personnel; schedules installations of new operating system software & other third party software; documents network start-up, shut-down & operations procedures.

Installs, tests & maintains operating system software & other third party software on mainframe computers; monitors security procedures; monitors computer room environment & maintenance of hardware.

Provides technical assistance to management & system users whether within DAS &/or in support of customer agencies; identifies, analyzes & resolves software problems associated with teleprocessing applications; contacts vendor representatives to resolve system problems; attends management meetings &/or vendor schools.

MAJOR WORKER CHARACTERISTICS:

Knowledge of supervisory principles/techniques*; employee training & development; computer science; computer hardware & peripheral equipment; functions & capabilities of software systems; computer programming software & related hardware systems. Ability to read & understand variety of technical material related to computer software & related hardware systems; define problems, collect data, establish facts & draw valid conclusions; communicate verbally on technical matters; more limbs/fingers easily to operate computer terminal.

(*)Developed after employment.

MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:

Completion of undergraduate core program in computer science which included study of Assembler, REXX, Clist & COBOL languages; 42 mos. trg. or 42 mos. exp. in software installation & maintenance of mainframe operating systems; 12 mos. trg. or 12 mos. exp. in employee training & development.

-Or 18 mos. exp. as Systems Programmer 3, 64193.

-Or 12 mos. exp. as Systems Programmer 4, 64194.

-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:

Work involves operation of computer terminal for long periods of time.