SERIES PURPOSE:
The purpose of the Network Administration Occupation is to provide local area &/or wide area computer network support services to agency users.

At the lowest level, employees learn to & monitor & maintain network services.

At the higher levels, employees administer division or local office area network &/or wide area network or design, implement & maintain network services.

GLOSSARY: The terms listed below, which will appear within the classification specification, are to be interpreted to mean the following:

CNA NETWORK CERTIFICATION: Designed for persons responsible for day-to-day operations of a network, with the typical tasks of adding/deleting users, backing up the server, loading applications & maintaining security. To earn certification, a candidate must demonstrate proficiency in a selected operating system (e.g., Netware 2.2, 3.1X or 4.0).

CNE/CBE/MCP NETWORK CERTIFICATION: Designed for persons to provide quality support for Netware networks including system design, installation & maintenance. To earn certification, a candidate must demonstrate mastery of networking concepts.

ECNE NETWORK CERTIFICATION: Designed for persons who have been CNE/CBE/MCP certified & focuses on the support of enterprise-wide networks. To earn certification, a candidate must demonstrate proficiency in specialized networking technology.

NOTE: Equivalent network certification would be as a result of a candidate attending a training program & demonstrating proficiency in the same/similar subject matter & skills.

INTERNETWORKING SERVICES: The services involve the planning & implementation of connecting dissimilar LANS &/or other computer systems (e.g., graphic workstations, minicomputers or mainframe computers) client server & multi-media systems & peer to peer networks which may use communication languages to communicate among the respective networks.

LOCAL AREA NETWORK (LAN): A group of computers & other devices that are connected by a communications link (network) which allows any device to interact with another on the network. A local area network generally spans a small geographic area, such as within a single building. For example: a powerful personal computer is used as a network file server with network licensed software stored on it. The file server is connected by an Ethernet cabling scheme to many personal computers & a single printer.

WIDE AREA NETWORK: A network that transmits over a large geographic area using lines provided by a common carrier of private telecommunications facilities and/or provides a link between dispersed local area network segments &/or provides the links from a computer center to remote locations. The Ohio Data Network is an example of a wide area network.
CLASS TITLE: NETWORK ADMINISTRATOR 1
CLASS NUMBER: 67131
EFFECTIVE DATE: 02/15/1998
NEW EFFECTIVE DATE: 
CLASS CONCEPT:
THE ENTRY LEVEL CLASS WORKS UNDER IMMEDIATE SUPERVISION & REQUIRES WORKING KNOWLEDGE OF COMPUTER SCIENCE OR RELATED FIELD IN ORDER TO MONITOR & MAINTAIN LOCAL AREA &/OR WIDE AREA COMPUTER NETWORK (E.G., RUN NETWORK DIAGNOSTICS, MANAGE NETWORK FILE & PRINT SERVER FUNCTIONS, CREATE & MAINTAIN USER CONNECTIVITY; CREATE USER ACCOUNTS BASED ON ESTABLISHED PROTOCOLS & USER PRIVATE DIRECTORY BASED ESTABLISHED PROTOCOLS & USER PRIVATE DIRECTORY BASED ON ADOPTED STANDARDS; TROUBLESHOOT NETWORK PROBLEMS; TRACK/MONITOR SOFTWARE METERING; COORDINATE NETWORK & APPLICATION SOFTWARE UPGRADES & MONITOR LICENSES; PROVIDE LIMITED SOFTWARE SUPPORT; ASSIGN USER TO ESTABLISHED SECURITY GROUPS).

CLASS TITLE: NETWORK ADMINISTRATOR 2
CLASS NUMBER: 67132
EFFECTIVE DATE: 02/15/1998
NEW EFFECTIVE DATE: 
CLASS CONCEPT:
THE FULL PERFORMANCE LEVEL CLASS WORKS UNDER DIRECTION & REQUIRES CONSIDERABLE KNOWLEDGE OF COMPUTER SCIENCE OR RELATED FIELD & COMPUTER NETWORK HARDWARE, SOFTWARE & OPERATING SYSTEMS & PROCEDURES IN ORDER TO ADMINISTER DIVISION OR OFFICE LOCAL AREA &/OR WIDE AREA NETWORK (E.G., CREATE/MAINTAIN USER ENVIRONMENT; TROUBLESHOOT USER STATION PROBLEMS; SUPPORT USERS IN USING NETWORK APPLICATIONS; INSTALL NETWORKED SOFTWARE APPLICATIONS; IMPLEMENT/ MONITOR SOFTWARE METERING) & DOCUMENT & COMMUNICATE PROBLEM RESOLUTIONS WITH OTHER NETWORK ADMINISTRATORS & COMPUTER PERSONNEL INVOLVED IN MAINTAINING LOCAL AREA NETWORK.

CLASS TITLE: NETWORK ADMINISTRATOR 3
CLASS NUMBER: 67133
EFFECTIVE DATE: 02/15/1998
NEW EFFECTIVE DATE: 
CLASS CONCEPT:
THE ADVANCED LEVEL CLASS WORKS UNDER DIRECTION & REQUIRES CONSIDERABLE KNOWLEDGE OF COMPUTER SCIENCE & COMPUTER NETWORK HARDWARE, SOFTWARE & OPERATING SYSTEMS & PROCEDURES IN ORDER TO DESIGN, IMPLEMENT & MAINTAIN COMPUTER NETWORK SERVICES FOR ASSIGNED AGENCY OR ONE OR MORE DIVISIONS.
CLASS TITLE: NETWORK ADMINISTRATOR 1  
CLASS NO.: 67131  
BARG. UNITS:  

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.)

- Monitors & maintains local area &/or wide area computer network (e.g., runs network diagnostics; manages network file & print server functions; creates & maintains user connectivity; creates user accounts based on established protocols; creates user private directory based on adopted standards; troubleshoots user station problems; tracks/monitors software metering; coordinates network & application software upgrades & monitors licenses; provides limited software support by assisting network users print to commonly shared printer; maintains printer queues; assigns security rights to user in work groups).

- Documents & communicates problem resolutions with upper level network administrators involved in maintaining network; diagnoses common network hardware problems (e.g., related to cabling; workstation equipment failure).

- Responds to 'production down' problems on 24 hour basis.

- In agency with large, integrated enterprise-wide network (e.g., Ohio Bureau of Employment Services), coordinates all activity with supervisor or manager responsible for entire network.

- Operates established data back-up & retrieval systems.

- Receives training in how to administer local area &/or wide area network.

MAJOR WORKER CHARACTERISTICS:

- Knowledge of computer science or related field; microcomputer network hardware, software & operating systems & procedures; network administration/network technology. Skill in operation of computer & peripheral equipment & keyboard operations. Ability to comprehend extensive variety of technical material, define problems, collect data, establish facts & resolve technical problems; cooperate with co-workers on group projects.

- (*)Developed after employment.

MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:

- Completion of undergraduate core coursework or 2 yrs. trg. in computer science or related field which either option including one course in use of microcomputer software & hardware & 1 course in network administration.

- 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:

- Not applicable.

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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.)

ADMINISTERS LOCAL AREA &/OR WIDE AREA NETWORK FOR ASSIGNED DIVISION/OFFICE WHICH INVOLVES CREATION/MAINTENANCE OF USER ENVIRONMENT (E.G., ESTABLISHES NETWORK DIRECTORY STRUCTURE; IMPLEMENTS SECURITY; MAINTAINS PRINTER QUEUES & PRINT SERVERS; MAKES REGULAR BACKUPS; IMPLEMENTS SECURITY PRIORITIES; CUSTOMIZES USER MENUS; ADMINISTERS CLIENT SERVER & MULTI-MEDIA TECHNOLOGIES ALONG WITH PEER TO PEER NETWORKS), TROUBLESHOOTS NETWORKING PROBLEMS, SUPPORTS USERS IN USING NETWORKED APPLICATIONS, INSTALLS & TESTS NETWORKED SOFTWARE APPLICATIONS & HARDWARE, OPTIMIZES & TUNES OPERATING SYSTEM TO RESOLVE PERFORMANCE ISSUES, IMPLEMENTS/MONITORS SOFTWARE METERING & UPGRADES NETWORK OPERATING SYSTEMS.

DOCUMENTS & COMMUNICATES PROBLEM RESOLUTIONS WITH OTHER NETWORK ADMINISTRATORS & COMPUTER PERSONNEL INVOLVED IN MAINTAINING NETWORK; WRITES NETWORK MAINTENANCE PROCEDURES.

RESPONDS TO 'PRODUCTION DOWN' PROBLEMS ON 24 HOUR BASIS; PERFORMS HELP DESK FUNCTIONS.

IN AGENCY WITH LARGE, INTEGRATED ENTERPRISE-WIDE NETWORK (E.G., OHIO BUREAU OF EMPLOYMENT SERVICES), COORDINATES ALL ACTIVITY WITH SUPERVISOR OR MANGER RESPONSIBLE FOR ENTIRE NETWORK

ATTENDS MEETING & TRAINING TO MAINTAIN NETWORK CERTIFICATION.

MAJOR WORKER CHARACTERISTICS:
KNOWLEDGE OF COMPUTER SCIENCE OR RELATED FIELD; MICROCOMPUTER NETWORK HARDWARE, SOFTWARE & OPERATING SYSTEMS & PROCEDURES. NETWORK ADMINISTRATION/NETWORK TECHNOLOGY. SKILL IN OPERATION OF COMPUTER & PERIPHERAL EQUIPMENT & KEYBOARD OPERATIONS. ABILITY TO COMPREHEND EXTENSIVE VARIETY OF TECHNICAL MATERIAL, DEFINE PROBLEMS, COLLECT DATA, ESTABLISH FACTS & RESOLVE TECHNICAL PROBLEMS; COOPERATE WITH CO-WORKERS ON GROUP PROJECTS.

(*)DEVELOPED AFTER EMPLOYMENT.

MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:
COMPLETION OF UNDERGRADUATE CORE COURSEWORK IN COMPUTER SCIENCE OR RELATED FIELD WHICH INCLUDED DISCUSSION & USE OF COMPUTER SOFTWARE & HARDWARE; 6 MOS. TRG. OR 6 MOS. EXP. IN MONITORING & SYSTEMS & PROCEDURES.

-OR 6 MOS. EXP. AS NETWORK ADMINISTRATOR 1, 67131A.

-OR CNA OR EQUIVALENT NETWORK CERTIFICATION.

-OR EQUIVALENT OF MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT NOTED ABOVE.

TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:
ATTENDS TRAINING TO MAINTAIN NETWORK CERTIFICATION.
UNUSUAL WORKING CONDITIONS:
NOT APPLICABLE.
CLASS TITLE: NETWORK ADMINISTRATOR 3
CLASS NO.: 67133
BARG. UNITS: 014

EFFECTIVE DATE: NEW 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.)

- Designs, implements & maintains computer network services for assigned agency or one or more divisions (e.g., evaluates network hardware & software & designs network configuration; sets up hardware; installs network cards, cabling, hubs, concentrators & token ring multi-station access units; installs & tests software; configures network server; installs network user software component; maintains physical links; administers client server & multi-media technologies along with peer-to-peer networks; designs, implements & maintains security; designs, implements & maintains global naming conventions among multiple servers; designs & implements disaster recovery plans to maintain data integrity, transaction tracking, disk mirroring, disk duplexing, redundant servers & automated tape backup installs & maintains application software; implements & maintains wireless, remote lan nodes & dial-up workstations; monitors traffic on network, hubs & routers to better utilize network & eliminate slowdowns; ensures wan security; monitors wan traffic & errors & takes appropriate corrective action ) & coordinates hardware installation &/or activities with data archival specialist/team & other personnel involved in maintaining computer network.

- Resolves complex or recurrent network problems; provides technical support to lower-level network administrators.

- Acts as security specialist or assists in developing security policies & procedures; reviews hardware & software options; evaluates hardware & software products & makes purchase recommendations; prepares reports for long range plan; assists in preparing budget for network operations; assists supervisor in design of new network, wiring plans, equipment purchases & related functions.

- In agency with large, integrated enterprise-wide network (e.g., Ohio Bureau of Employment Services), coordinates all activity with supervisor or manager responsible for entire network.

- Attends industry seminars & conferences; maintains state-of-art awareness of current vendor offerings & standards; attends training to retain network certification; confers with training officer in order to produce training materials or evaluate courses for distribution; facilitates network training courses.

- Responds to 'production down' problems on 24 hour basis.

MAJOR WORKER CHARACTERISTICS:

- Knowledge of computer science or related field; microcomputer network hardware, software & operating systems & procedures; network administration; budgeting*; employee training & development*. Skill in operation of computer & peripheral equipment & keyboard operations. Ability to comprehend & discuss large number of technical variables & determine course of action; cooperate with co-workers on group projects.

(*)DEVELOPED AFTER EMPLOYMENT.

MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:

Completion of undergraduate core coursework in computer science or related field which included discussion & use of microcomputer software & hardware; 12 mos. trg. or 12
MOS. EXP. IN COMPUTER NETWORK ADMINISTRATION TO INCLUDE UNDERSTANDING OF OPERATING SYSTEMS & NETWORKING TECHNOLOGIES; 1 COURSE OR 3 MOS. EXP. IN COMPUTER NETWORKING.

-OR 12 MOS. EXP. AS NETWORK ADMINISTRATOR 2, 67132A.

-OR CNE OR CBE OR MCP OR EQUIVALENT NETWORK CERTIFICATION.

-OR EQUIVALENT OF MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT NOTED ABOVE.

TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:
ATTENDS TRAINING TO MAINTAIN NETWORK CERTIFICATION.

UNUSUAL WORKING CONDITIONS:
NOT APPLICABLE.