AUDITOR OF STATE CLASSIFICATION SPECIFICATION	**CLASSIFICATION SERIES:** NETWORK ADMINISTRATION	**SERIES NO.:** 6713
	MAJOR AGENCIES: AUDITOR OF STATE ONLY	**EFFECT. DATE:** 02/15/1998 **NEW EFF. DATE:**

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 WORK- STATIONS, 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:	CLASS NO.:	BARG. UNITS:
NETWORK ADMINISTRATOR 1	67131	

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.)

   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.

CLASS TITLE:	CLASS NO.:	BARG. UNITS:
NETWORK ADMINISTRATOR 2	67132	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.)

   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:	CLASS NO.:	BARG. UNITS:
NETWORK ADMINISTRATOR 3	67133	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 TOT 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 WIT 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.