

# COMPUTER NETWORK ADMINISTRATOR

## { JOB DESCRIPTION }

Computer network administrators manage local area networks (LAN) and wide area networks (WAN) within a firm. They participate in the configuration of the network, research technical manuals and brochures, and recommend purchases of application servers, peripherals, and software. They test and evaluate the hardware and software to determine efficiency, reliability, and compatibility with the system and upgrade components when necessary. They also direct the work of network technicians and computer support staff.

## { SKILLS AND APTITUDES NEEDED }

- Knowledge of electric circuit boards, processors, chips, and computer hardware and software, including applications and programming
- Knowledge of transmission, broadcasting, switching, control, and operation of telecommunications systems
- Knowledge of principles and processes involved in business and organizational planning, coordination, and execution. This includes strategic planning, resource allocation, manpower modeling, leadership techniques, and production methods
- Knowledge of equipment, tools, mechanical devices, and their uses to produce motion, light, power, technology, and other applications
- Knowledge of implementation planning, equipment selection, operation monitoring
- Good oral and written communication skills

Computer network administrators also develop plans to safeguard computer files against unauthorized system access and to meet emergency data processing needs. They may do so by modifying security files to incorporate new software, or change individual access status after discussing needs, security and programming issues with staff members. These administrators also write reports to document computer security, emergency policies and procedures, as well as test results. Knowledge of new technology is essential.

## { SOUTH PLAINS }

Avg. Wage  
**\$20.63**

Avg. Annual  
Job Openings  
**15**

Employment in  
1998 2008  
**210 340**

## { TEXAS }

Avg. Wage  
**\$26.86**

Avg. Annual  
Job Openings  
**1,440**

Employment in  
2000 2010  
**17,780 31,430**

## { U.S. EMPLOYMENT }

In 1998  
**228,537**

Female **28.6%**  
Minority **16.5%**

## BUSINESS & MARKETING CAREERS



### { PREFERRED EDUCATION }

- Bachelor degree in management
- Associate degree in related field such as electronics engineering, computer science, or telecommunications
- Vendor-specific or vendor-neutral program training may be required by employer

### { LICENSE / CERTIFICATION }

- Vendor-specific licensure may be required by employer

### { REGIONAL EDUCATION PROVIDERS }

- **SOUTH PLAINS COLLEGE**- Associate of Applied Science (A.A.S.), Computer Information Systems; Associate of Applied Science (A.A.S.), Electronics Service Technology; Computer and Network Technician Certificate; Computer Maintenance Certificate; Associate of Arts (A.A.), Telecommunications
- **TEXAS TECH UNIVERSITY**-Bachelor of Science (B.S.), Computer Science; Bachelor of Science (B.S.), Engineering Technology; Bachelor of Arts (B.A.), Telecommunication
- **LUBBOCK CHRISTIAN UNIVERSITY**-Bachelor of Science (B.S.), Computer Information Systems
- **WAYLAND BAPTIST UNIVERSITY**-Bachelor of Science (B.S.), Computer Information Systems

### { JOB SITES }

Programming, Data Processing, & Other Srv.	26.8%
Telephone Communications	7.9%
Secondary and Higher Education	9.9%
Local Government, Except Education	3.8%
Mgmt. and Public Relations Services	3.1%

### { FOR MORE INFORMATION }

Association for Computing Machinery (ACM), 1515 Broadway, New York, NY 10036, (800) 342-6626, [www.acm.org](http://www.acm.org)

Institute for Certification of Computing Professionals (ICCP), 2350 East Devon Ave., Suite 115, Des Plaines, IL 60018-4610, (800) 843-8227 [www.iccp.org](http://www.iccp.org)

Institute of Electrical and Electronics Engineers—United States of America, 1828 L St. NW, Suite 1202, Washington, DC 20036-5104, (202) 785-0017 [www.ieee.org](http://www.ieee.org)