

# DACUM Research Chart for Network Administrator

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1900 Kenny Road  
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June 19-20, 2008

# DACUM Research Chart for Network Administrator

Duties		← Tasks →				
<b>A</b>	<b>Coordinate Information Technology Projects</b>	A-1 Identify project scope of work	A-2 Identify project stakeholders	A-3 Outline project deliverables	A-4 Establish project timeline	A-5 Identify planned system materials (e.g., hardware, software)
<b>B</b>	<b>Implement New Information Technology Infrastructure</b>	B-1 Evaluate alternative systems solutions	B-2 Refine system design	B-3 Conduct facility planning	B-4 Procure IT materials & equipment	B-5 Install system hardware
<b>C</b>	<b>Maintain Information Technology Systems Operations</b>	C-1 Monitor IT hardware systems	C-2 Monitor IT software systems	C-3 Evaluate IT system updates	C-4 Test IT system updates	C-5 Deploy IT system updates
		C-13 Retire software	C-14 Retire IT hardware			
<b>D</b>	<b>Predict Information Technology System Capacity</b>	D-1 Monitor IT systems usage	D-2 Monitor network usage	D-3 Monitor software usage	D-4 Monitor IT facilities usage	D-5 Determine growth rates
<b>E</b>	<b>Process Customer Requests</b>	E-1 Evaluate service request	E-2 Prioritize service requests	E-3 Perform requested work	E-4 Update service request ticket	E-5 Provide customer with status update(s)
<b>F</b>	<b>Maintain Business Continuity</b>	F-1 Plan processes to meet system recovery SLA	F-2 Review recovery IT equipment schedule	F-3 Update vendor contact list (e.g., contract number)	F-4 Update system topology diagrams	F-5 Maintain operational system recovery procedure
<b>G</b>	<b>Maintain Information Security</b>	G-1 Perform risk assessment	G-2 Maintain system access	G-3 Maintain user accounts	G-4 Manage security certificates & keys	G-5 Track information security vulnerabilities
<b>H</b>	<b>Continue Education</b>	H-1 Research future trends in technology	H-2 Obtain certification (e.g., industry/technical)	H-3 Maintain certification (e.g., industry/technical)	H-4 Participate in peer mentoring	H-5 Attend vendor/product training

A-6 Identify project resources	A-7 Create system design	A-8 Conduct impact assessment	A-9 Perform IT cost analysis	A-10 Perform technical consultation	A-11 Provide project status update	
B-6 Configure system hardware	B-7 Install system software	B-8 Configure system software	B-9 Perform system testing	B-10 Deploy system into production	B-11 Create system documentation	B-12 Provide system training
C-6 Identify IT system problem	C-7 Restore IT system service	C-8 Conduct preventative maintenance	C-9 Renew maintenance agreements	C-10 Renew support agreements	C-11 Maintain IT parts inventory	C-12 Maintain IT media library
D-6 Forecast usage trends	D-7 Forecast future project needs	D-8 Create capacity change recommendations				
E-6 Close service request ticket						
F-6 Manage data back-up schedule	F-7 Verify daily data back-up	F-8 Manage back-up media (e.g., onsite/offsite)	F-9 Restore system data	F-10 Restore service (e.g., hardware/software)	F-11 Participate in "on call" rotation	
G-6 Apply software patches/updates (e.g., anti-virus)	G-7 Address information security vulnerabilities	G-8 Monitor information security events	G-9 Respond to information security events	G-10 Assist in legal discovery	G-11 Participate in information security policy development	G-12 Provide information security user awareness training
H-6 Review technical literature	H-7 Participate in professional organizations	H-8 Attend conferences & trade shows	H-9 Pursue advance degrees (e.g., college/university)			

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## General Knowledge and Skills

Typing skills  
Math  
Verbal communication  
Written communication  
Listening skills  
Reading  
Statistical analysis  
Operating systems  
Scripting languages  
Boolean algebra  
General hardware knowledge  
Network protocol  
Open systems interconnect model  
Troubleshooting  
Time management  
Multitasking

General database knowledge  
Project management  
Technical writing  
Data storage management  
Security management  
Cryptography knowledge  
Domain name services  
Customer service  
Network topology  
Enterprise IT operations  
Decision making skills  
Network infrastructure components  
Productivity tools skills  
Flow charting  
Change management

## Worker Behaviors

“Can do”  
Positive attitude  
Prudent  
Integrity  
Follow through  
Analytical  
Good hygiene  
Team player  
Dependable  
Self motivated  
Common sense

Service oriented  
Dedicated  
Flexible  
Creative  
Resourceful  
Responsible  
Self control  
Considerate  
Sense of humor  
Confidence  
Empathy

## Tools, Equipment, Supplies and Materials

Security tools  
Testing tools  
Diagnostic tools  
Basic hand-tools  
Jump drive  
Writing utensil  
Label maker  
Phone and pager  
Laptop/desktop  
Network equipment  
Monitoring tools  
Cables  
Productivity tools

- Word Processor
- Email
- Spreadsheet
- Presentation software

Media-CD, DVD, Floppy, ZIP  
Office supplies  
Computer supplies  
Reference manuals

## Future Trends and Concerns

Virtualization

- Server
- Desktop
- Application

Energy conservation  
Role-based security  
Telecommuting  
Security posturing  
Biometrics  
Unified communications  
Maintaining legacy infrastructure  
New technologies blending personal/professional life  
Advances in wireless technology  
Higher speed internet access  
Internet Protocol version 6 (IP v6)

## Acronyms

SLA Service Level Agreement  
IT Information Technology