



# NICs

NETWORK INFORMATION CONNECTION, A TECHNICAL E-JOURNAL

## Team Final Exams

by Ron Rosenberg

When we reflect back on our experiences during our formal education, we can usually identify two or three teachers who had an impact on the way we approach our work. If we're observant, we can expand upon these lessons to improve our personal effectiveness.

During college, one of my computer science professors, Ken Reek, had unique approaches to teaching. For example, if he assigned a computer lab assignment to the class, he also completed it himself and "turned it in" by the due date. If an assignment was due on Thursday, it would be counted as "on-time" if it was under his office door when he arrived on Friday morning. He was creative, knew his stuff, and got along really well with his students, being only a few years older than we were.

Needless to say, I was glad to see that he would be teaching the very last course I would be taking for my undergraduate degree: Operating Systems Lab. This class represented the culmination of four years of work in software engineering and systems software. We had to write an operating system, file handlers, and low-level device drivers. Those of you with computer backgrounds know what I'm talking about. For those of you who don't, suffice it to say that this was probably the most difficult course in the department.

So what did Ken do to make it interesting? The lab assignments were to be done in teams of three people. I quickly teamed up with two very smart people, and we got to work. Surrounding yourself with capable people makes any job easier, and we got excellent grades on all our work.

Finally the end of the quarter arrived and with it came final exams. Operating Systems Lab was the last of these tests. It was not just the last test of the quarter; it was the last test of senior year. After this exam I would be done with college!

Ken Reek walked in carrying a stack of blank paper, handed out about ten sheets to each student, and said, "You've all done your work in this course in teams; you'll be working in the real world in teams; and today you'll take your final exam in teams. Get with the team you've been with all quarter and write an electronic mail system." We got down to work and knocked out the assignment in about an hour.



You have similar opportunities in your work, and your life, to develop teams. Things that seem difficult and overwhelming can become easier if you get input from other people. And hiring people with diverse backgrounds brings new perspectives to the table. Life is full of tests; they're just not all clearly presented as "final exams." The next time you're faced with a challenging problem, follow Ken Reek's advice and form a team to attack the problem. You'll find the outcome rewarding. 

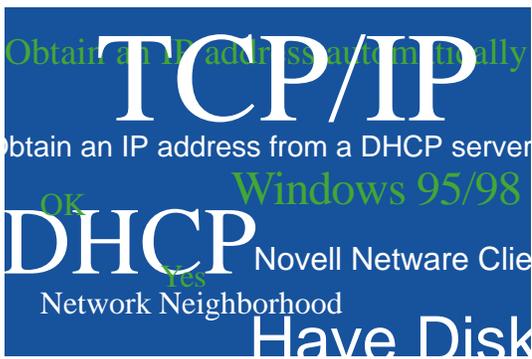
*Ron Rosenberg is the president of QualityTalk, Inc. and author of Breaking Out of the Change Trap. He helps organizations improve performance through high-energy training, consulting, and keynote programs. Contact information: E-mail: [EightRings@qualitytalk.com](mailto:EightRings@qualitytalk.com) • Website: <http://www.qualitytalk.com> Phone: 919-847-0662 or 800-260-0662.*

# Configuring Workstations for DHCP on Netware

by SteveCrowley

After DHCP has been set up on the network, Windows 95/98 or NT clients must be configured to be able to take advantage of this timesaving tool.

On the Windows clients, there are two ways to get to the starting point. The first is to simply look for the Network Neighborhood icon on the desktop, right click it, and click properties from the drop down menu. The other way is to



double click My Computer on the desktop, double click Control Panel, and double click the Network icon within control panel. Both of these methods will get you to the properties screen for Network Neighborhood.

Once into this area, you will want to look and make sure you have the configuration tab activated. In other words, look to see if the screen is showing the information for the configuration tab. You must make sure that the TCP/IP protocol has been installed. If you do not see it, simply click the add button, click protocol, click add, click Microsoft, click TCP/IP, and click OK. This will add the TCP/IP protocol to your Network Neighborhood. Of course, we must make sure that a network adapter has been installed and configured to use TCP/IP. The process is very similar to that of adding a protocol. On the configuration tab (screen) click add again, click adapter, add, and choose your adapter from the list. If your adapter is not on the list, click Have Disk and insert the driver you received with your adapter card. On the same configuration tab screen, just

below the add button, is a box for describing which type of network logon you are going to use. You must have Novell Network Client showing in this box. If this is not the case, you must add it. Just like before, click add, and this time click Client. You will be given a choice of vendors to choose from. Click on Novell, and choose Novell Network Client. If you will be adding a client from a disk, simply click Have Disk and load your client. You are now very close to being able to make this a DHCP client.

The next step is to configure TCP/IP to use the DHCP server to automatically receive an IP address. I don't know about you, but I like just about anything that has "automatic" attached to it. That's a signal that once the machines are configured I won't have to be so involved. On the configuration screen, highlight TCP/IP Ethernet Adapter and click the properties button. If you are using an NT client, click on the protocols tab to view TCP/IP properties. You are now shown a screen that gives you two radio buttons to choose from. Click the button that says "Obtain an IP address automatically" (There's that word again.) On a Windows NT client click the button that says "Obtain an IP address from a DHCP server. This tells the computer that it won't be assigned a static IP and will be getting its IP by home delivery.

If you were previously using a static IP, you will be asked if you want to enable DHCP. By all means, click YES. Click OK a number of times to close out the screens and reboot the client. When the client comes back up, it will now be set up to get its IP information from the DHCP server. When the client goes out to get its IP it will make a request. Any of the DHCP servers that hear the request will offer an IP for lease to the client. The client then looks at all the offers and picks the best one. If there are several that are equally good, the client will pick the one that arrived first. The client sends back a message, that both reaches the server that it took the IP from and the other offering DHCP servers, that announces it has accepted an offer. The servers that had offers rejected now know that they can offer those numbers up to other requesting clients. The server from which the client accepted an IP will now respond with the IP, a subnet mask, and a lease period.

## NICs NETWORK INFORMATION CONNECTION

is published by the  
INSTITUTE FOR NETWORK PROFESSIONALS

**Prices** Domestic \$100/yr (\$8.50 each)  
Outside US \$125/yr (\$10.00 each)

**Phone** US 801 223 9444  
Fax 801 223 9486

**Address** Please send tips, special requests, change of address, subscriptions, fulfillment questions, requests for group subscriptions and other correspondence to:

NICs  
1372 South 740 East  
University Office Park  
Orem, UT 84097-8083

or contact us via Internet E-mail at:  
info@inpnet.org

**Postmaster** Periodicals postage paid in Provo, UT. Send address changes to:

NICs  
1372 South 740 East  
University Office Park  
Orem, UT 84097-8083

**Copyright** © 2000, Institute for Network Professionals. NICs is an independently produced publication of the Institute for Network Professionals. All rights reserved. Reproduction in whole or in part in any form or medium without express written permission of the Institute for Network Professionals is prohibited. The Institute for Network Professionals reserves the right with respect to submissions to revise, republish, and authorize its readers to use the tips submitted for personal and commercial use.

Microsoft, Windows, Windows NT, and MS-DOS are registered trademarks of Microsoft Corporation. NetWare is a registered trademark of Novell, Inc. All other product names or services identified throughout this journal are registered trademarks of their respective companies.

<b>Staff</b>	Editor-in-Chief	KeithParsons
	Managing Editor	DarrylAlder
	Testing Editor	DeniBerger
	Tech Support Editor	ToddHindmarsh
	Technical Advisors	ArtAllen
		SteveCrowley

**Back Issues** To order back issues, call Customer Relations at 801 223 9444. Back issues cost \$8.50 each, \$10.00 outside the US. You can pay with MasterCard, Visa, or American Express, or visit our archive at <http://www.inpnet.org/nics>.

The Institute for Network Professionals, in alliance with technical suppliers and organizations, makes resources accessible to network professionals worldwide by providing products, training, publications and events.