

NICs NETWORK INFORMATION CONNECTION

AN ESSENTIAL SUPPORT RESOURCE FROM THE INSTITUTE FOR NETWORK PROFESSIONALS

Counseling and Coaching (Part 2)

by Darryl Alder

These days, if corporations want to get ahead, they need a winning team of performers who really know how to get a job done. Getting the job done is a challenging part of leadership, since you get it done with a team of individuals, each requiring some one-on-one training and feedback.

In part one of this article (*see NICs archives, issue 6 at <http://www.inpnet.org/NICs>*) we explained the value of counseling to help improve attitudes and interpersonal relationships. Effective coaching, like counseling has the pleasant and sometimes unexpected result of also improving relationships between leaders and subordinates. However, the focus in coaching is on improving knowledge and skill, not so much on attitude.

What the Skill Can Do

To get a view of what this skill can do, consider legendary UCLA coach John Wooden's coaching style. Even though he "... won more NCAA basketball championships than anyone else, [he] was distinctly unlike most coaches during a game. Rather than shouting and trying to command his team from the sidelines, he was always a picture of almost detached calm. The secret? Wooden drilled his players in the basic principles of the game and taught them to make their own decisions on the floor. When the game was on, he largely left the playing of the game to them, with impressive results." (Taken from the "Manager as Teacher," by Dennis R. Webb, The Franklin Institute, Quick Scan No. 9, 1987)

When you coach employees, the objective is to improve their ability to do the tasks at hand; this without your close supervision and the assurance the job is being done right. Good coaching boosts employee production capability and prepares them for future roles. They become stronger, more independent decision makers working within the framework of your company.

Understanding the Skill

Coaching is both a directive and supportive behavior managers use with subordinates. This means, when you are coaching, you are concerned about the task, its quality and deadlines, and you are also concerned about developing interpersonal relationships with team members.

Florence M. Stone, editor for the American Management Association newsletter, suggests that it takes a special set of skills to coach well. She suggests:

"Among the skills you need are the abilities to:

Set direction. The team will depend on you to clarify its mission and make sure the group stays on course.

Organize. Bring the right people together. Give them the information they need before and after each meeting. Make sure they follow through on assignments.

Facilitate. Create an atmosphere that encourages people to share diverse viewpoints without fear of criticism or infighting.

Summarize. Briefly go over remarks made by team members and review the team's progress both during the meeting and in the written minutes.

Develop. Teach others the skills they need to work together as a team."



IN THIS ISSUE

1

Leadership
Development:
**Counseling
and Coaching**
Part 2

4

Linux
Choice of a GNU
Generation

5

Linux Usenet
Newsgroups

7

Linux
WWW
Resources

8

DOS to Linux
Commands

9

Tips and Tricks

10

Exam
Preparation
Exchange 5.5
part 2

16

Dress for
Success

18

Member
Specials
Announced

Just as athletic coaches set team direction, organize, facilitate player input, summarize what the team has learned, and train them to win, a manager can use these same strategies in the workplace.

Putting the Skill to Work

For most employees, setting direction means giving clear instructions at the outset of the job. As part of starting a new task, or in the initial stages of orienting a new employee, plainly lay out expectations. Some managers may find this hard, but the first impressions about expectations you give an employee set the stage for performance later on.



You need to be clear about how the job should be done. Be specific and make sure the employee knows what you want, how the task is to be completed and when it is due. Practice asking the right questions and listening well to answers given. Frequent contact is a must with any new employee or if experienced staff are facing a new task.

Once the employee tries a task, then you can start to offer feedback. Make corrections in performance as needed, but be sensitive to the reactions your suggestions are invoking. Some employees can't handle much criticism in the early stages of a new work relationship. Be very specific about what is right and what is wrong about the job being done.

By identifying things they cannot change, or if you are not specific enough about the quality desired, you run the risk of frustrating your staff. Keep the focus on behaviors you want or behaviors they can change. For example, after showing one of your technical staff how to do "adds, changes, and drops" of user accounts, comment on how well or poorly the job was done.

Simple but effective feedback is something we can all use, especially when we are learning how to do something new. An example to avoid, is saying things like, "We sure appreciate your good work." Instead say, "Thanks for getting in on time last weekend. The extra effort I saw you making was an example to the whole team."

If there is a problem, avoid generalizations like, "You sure have an attitude today." Instead say, "I've noticed your reluctance to work the help desk lately. Why is that?" This can serve to open a discussion for counseling (attitude improvement) or coaching (skill development) depending on the responses they give.

In early stages of coaching a new task, staff will look to you to organize the team with the right

people. That means interviewing longer, getting others' views on candidates and hiring for the right knowledge, skill and attitude sets.

In the organizational phase, you should give employees as much information as you can gather. This includes training by you or an outside resource. Organizing also requires the leader to assign and monitor tasks to make sure they are completed properly.

As the group's facilitator it is necessary for you to create an atmosphere that encourages people to share diverse viewpoints. This means disciplining yourself to be sure every voice is heard. It's like a coach who thinks of players left on the bench, but gives them some floor time too. While this may not be a winning strategy for competitive athletic events, it's the best way in the workplace.

Once views are shared, working for some kind of consensus ought to be the goal. Don't settle for majority rule since it makes the losers less a part of decisions. Sharing in this kind of environment often produces better solutions and is the root of synergy. However, such a climate cannot be engendered if there is fear of criticism or infighting. So you will have to begin by building rapport with your staff individually. Be an example of how they should treat each other. Create a positive, growth environment that treats mistakes as learning opportunities. Help each individual who takes a risk feel like a hero and discuss what can be learned from their trials, successes and failures.

As team members feel free to share their views and ideas, your role will be to keep them on track, to review their ideas, and to report progress you observe.

Regardless of all the other coaching tasks you face, none will serve you better than staff development. Begin by assessing an employee's competence and commitment for a task. Do this by asking:

1. Does the employee have enough experience and technical skill for the task, as well as knowledge about the organization?
2. Does the staff member have abilities developed in other jobs which apply to this task, (such as planning, organizing, decision-making and problem solving)?
3. Is there desire and enthusiasm to do the task well?
4. Is the employee self-assured and confident in this and/or other areas?

"Coaching is face-to-face leadership that pulls together people with diverse backgrounds, talents, experiences and interests, encourages them to step up to responsibility and continued achievement, and treats them as full-scale partners and contributors."

Tom Peters,
in *A Passion for Excellence*

5. Has recent performance been improving, staying the same or decreasing?

If you decide “no” for question 1, start technical training or task reorientation (who, what, when, where, how and why). This means you need good teaching skills yourself (see “Effective Teaching,” NICs no. 2, 1999) or you will need outside resources. You may also find more frequent observation of task performance helpful. Follow it up with clear feedback.

If you decide “no” for question 2, you will also need to start training, however modeling on your part may be equally effective. Give the employee an opportunity to practice the task, then offer clear feedback.

If you decide “no” for questions 3 or 4 you may need to use supportive behaviors and counseling (see part 1 of this article in the last issue of NICs). This could include positive reinforcement, discussion of incentives for effective performance, listening for a better understanding, establishing short-term goals, encouraging risk taking and analysis of performance consequences.

Coach to develop all employees to their highest level of competence. Dennis Webb explains,

“... this kind of manager is a teacher seeking to empower people to take control of their individual work contexts. The goal of the manager as teacher is to make subordinates at least as competent as he or she is. Rather than seeing subordinates as potential rivals, this manager sees them as colleagues.

The leader teaches others the basic principles and concepts they must understand in order to make correct decisions on their own. Overall organizational performance and adaptability are an obsession. The leaders sees diversity in opinion as a strength.

The principle leadership activity is teaching, with the goal of empowering, testing and fitting employees for performance and adaptability. The most important thing taught is how to make decisions.

Employees feel they are colleagues, not subordinates.

This management approach contains a seeming dichotomy—the best way to maintain control ... is to give it away. And control can be delegated in such a situation only if the subordinate’s competence approaches or exceeds that of the delegator.” (Webb)

COACHING	
Do's	Don'ts
Be a model for excellence. Start with someone you can motivate first, yourself!	Give advice that you can't, don't or won't follow yourself.
Hire people who want to grow and who have their own ideas. Spend more time in the interview asking targeted questions about their knowledge, skills and attitudes.	Hire the wrong people. Surmise you can't have someone else also interview a potential employee.
Build rapport with your staff and create a positive, growth environment that treats mistakes as learning opportunities.	Change from coach to despot. Threaten your staff.
Clearly explain what is wanted and how their job fits into the overall mission and strategy of the company.	Be impatient. Assume anything!
Be specific about what each individual can do to improve. Write goals down. Train to meet goals. Deal with problems as they arise.	Ignore problems, hoping they will go away.
Praise them for good work. Be sincere, concise and specific.	Focus on attitudes, when it's poor behavior you want to eliminate.
Determine who has potential and get them to stretch to new skill levels. Explain what is in it for both them and the company.	Make implied promises.

Summary

When you work to develop individual team members, you need to spend time counseling and coaching; it all starts with building staff relationships by mastering the skill of listening. Time and effort spent in these activities should be directed at improving knowledge, skill and attitudes of each employee.

It is important to recall successful counseling is usually based more on good listening than on giving advice. Its focus is trying to understand others. When necessary counseling can be used to address performance problems, but the best use of counseling remains building trust relationships and improving attitudes.

In coaching, the center is on improving team members’ knowledge and skill. This kind of coaching presupposes that you as leader are in a position to help your staff. Even though you may not have the skill to teach everything yourself, you have the power to access resources in their behalf. Just like a sports coach, you direct team strategy. You give clear directions and offer suggestions for improvement. Team members develop bit by bit, helping the whole team grow. You have happier employees, get tasks done on time, and get them done right.

LINUX

Choice of GNU Generation?

by **Scott Sharkey**

Scott Sharkey is President of LANshark Systems, Inc., a long-time Banyan VINES vendor who has been developing software on Linux for use on VINES and recently announced Linux pre-installed servers, technical support, and consulting services.

It's in, it's news, and it's not owned by Microsoft. So is it for you?

This article was reprinted with permission from the Enterprise Networking Journal's May/June 1999 issue.

Linux (pronounced LIH-nucks) is a freely distributable, independent Unix-like operating system initially created by a young Finnish Computer Science student at the University of Helsinki, Finland, Linus Torvalds. He began working on Linux in early 1991 and announced version 0.02 on the Internet on October 5, 1991. Many developers on the Internet joined the development project, and Linux was born.

Version 1.0 (the first "stable" version) was released in 1994, and the current version is 2.2.2. Linux is now available for Intel x86, Motorola 68K, Digital Alpha, Sun SPARC, Mips, Motorola PowerPC, and several other processors in both 32- and 64-bit versions. Linux is POSIX compliant, and uses no AT&T or any other proprietary source code. Much of the software available to run on Linux comes from the Free Software Foundation's GNU (Gnu's Not Unix) project, headed by Richard Stallman.

Radio Free Linux

Linux is technically just an operating system "kernel." The Linux products that you see advertised today from Red Hat Software, Caldera, and others are called "distributions." They come in many sizes and are designed for many specific purposes.

A Linux distribution is a combination of a kernel and a set of utilities, servers, GUI components and applications which the distributor thinks will be useful or attractive, packaged in most cases with some installation programs and utilities to make the system easier to install and manage. Some distributions include technical support as well.

Almost all Linux software is available under the GNU Public License (GPL) which is a unique software license that allows for the software to be sold only so long as the source code is freely available and redistributable by anyone who want to use or modify it. These distributions are generally available from the manufacture and resellers for a modest fee (usually, under \$100) and most are also downloadable

from the Internet if you've got the time and patience. Unlike proprietary software, you are free to install GPL software on as many machines as you like, without additional licensing fees.

Linux is truly one of the first "products" of the Internet, and could not have been developed without the Internet. Linux developers are scattered all over the world and include hobbyists, students, and a surprising number of computer professionals—many of whom are experts in their given fields. In addition, almost all Linux developers use Linux as their base operating system to communicate with each other. This ensures that problems and bugs are corrected quickly by users familiar with how the system is used in day-to-day work. While the Linux kernel itself is an independent development, most of the utilities, tools, and applications have been chosen from among the best available software. Many of these tools have been in use in other Unix operating systems for many, many years and are very mature products.

How is Linux Different?

The first thing that most people notice about Linux is its price. It doesn't have one. It is true that Linux software can be obtained for no investment if you're willing to spend the time. But Linux's "free" nature is actually one of the *least* important differences between Linux and other proprietary operating systems—though being able to obtain the software cheaply does tend to keep the prices of the entire system in the "very affordable" range.

More important perhaps than the price is that Linux offers "intellectual freedom". That is, Linux and most Linux software can be copied and redistributed without paying royalties to anyone. And the license ensures that the basic operating system will *never* come under the control of any one person or company. The freedom of the operating system extends to the ability to modify it to suit specific needs, or just to improve it for your own use. The availability of the source code, and the lack of

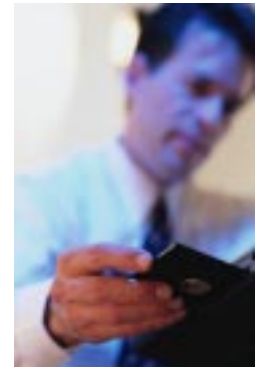


royalties, has enabled Linux to go from no users in 1991 to over 12 million (IDC estimate) in just under seven and a half years!

This freedom has made it possible for hardware manufacturers to develop drivers for their hardware without purchasing source code or signing restrictive non-disclosure agreements. It has also made it possible for third parties to develop drivers where the original vendor was unable or unwilling. It has made possible ports to all of the above-listed processors, and the free availability of source has led to an explosion of software and applications for almost any conceivable task. Universities all over the world are leading the use of Linux in their operating system laboratories because the source code is the greatest teaching tool available. A huge potential benefit of this is that almost all of the newest cutting edge computer science research is being developed on or for Linux.

Another key difference between Linux and other operating systems is that the “Open Source” development model tends to lead to more reliable and secure software. Because the source code is openly available to anyone, bugs tend to get found and fixed faster than on any other system. Recent research in computer science shows that the skill of *defining/documenting* a bug and the skill of *correcting* that bug are fundamentally very different and that it is rare for one person to have both abilities.

Because literally thousands of programmers are working with the Linux sources, the odds that a bug will be discovered, documented, and then fixed go up tremendously. In one recent example, a security hole in the TCP/IP protocol stack used on almost all computers (including Linux and MS products) was diagnosed and corrected on Linux in under six hours. The “patch” for Linux was released simultaneously with the announcement of the bug. Some



CURRENT LINUX USENET NEWSGROUPS

Note that the list does not include international newsgroups in other languages, such as French, German, Italian, or Spanish. Here's a handy tip: if your ISP does not carry the following newsgroups, browse to <http://www.dejanews.com> (and then call your ISP and ask for the Linux newsgroups!).

alt.linux Alternative views, discussions of Linux.

alt.linux.slackware Alternative views, discussions of the Slackware distribution of Linux.

comp.os.linux.advocacy Rants, raves, taunts, and flame wars between Linux's Defenders of the Faith and the minions of the dark side .

comp.os.linux.alpha Discussions of Linux on the Digital Equipment Corporation's Alpha CPU

comp.os.linux.announce Commercial, user group, and software release announcements

comp.os.linux.answers The definitive source of new or updated Linux HOWTOs, FAQs, and other Linux documents

comp.os.linux.development.apps Discussions concerning porting software programs and using compilers or other languages for Linux.

comp.os.linux.development.system Linux kernel and other programming information, such as modules or device drivers.

comp.os.linux.hardware Questions, answers, and debates concerning using different hardware with Linux

comp.os.linux.m68k News and development information about Linux on Motorola 68x000-series CPUs.

comp.os.linux.misc Miscellaneous questions, answers, and debates about hardware and software for Linux.

comp.os.linux.networking Discussions about topics such as communications and networking administration and configuration

comp.os.linux.portable Discussions on using Linux on laptop computers

comp.os.linux.powerpc News and development information about Linux on the PowerPC series of CPUs

comp.os.linux.setup Questions and answers about how to install, set up, configure, or maintain Linux

comp.os.linux.x Discussions about installing configuring, and using the X Window System and X11 clients with Linux.

linux.appletalk Discussions about using Apple computer's LocalTalk protocol and Linux

linux.debian.announce Announcements about the Debian Linux distribution

linux.debian.user Discussions about the Debian Linux distribution

linux.dev.* More than 60 newsgroups discussing program development for different Linux distributions, software, and hardware.

linux.redhat.misc Discussions about Red Hat Software, Inc.'s Linux distribution

proprietary operating systems took more than six months to release appropriate patches, and many are not yet deployed in most client sites. Meanwhile, any teenager with a computer can bring down systems at will without special access privileges or even special knowledge.

Linux Versus Other Operating Systems

Linux supports almost all of the facilities that a modern operating system is expected to have, such as symmetric multiprocessing, large file and disk support, wide hardware compatibility, and a modern kernel capable of multitasking and supporting multiple users. Linux is based on the POSIX standard for Unix, which allows for a high degree of portability between Linux and other Unix operating systems.

Linux is compatible at the system call level with most Unix implementations, and it is generally a pretty trivial project to port existing Unix software to Linux as Informix discovered when they ported their database to Linux. In the words of their development manager, “We just copied the software over and ran ‘make’.” But because Linux’s kernel is a completely independent redesign, it generally runs faster on given hardware than some older Unix implementations, which were designed in the mid-70’s.

Microsoft Windows (95/98) offers better application integration, and easier installation and system maintenance at the cost of lower flexibility and less power than Linux. But Linux is catching up fast. While I would not recommend Linux for most users’ desktops today, development projects such as KDE and GNOME are fast making it possible to run Linux on the desktop in a manner similar to Windows. Linux’s internal support for TCP/IP, multi-tasking, and multiple users is far, far stronger than Windows, and it is much more reliable than a given Windows system. Generally, Linux is also far more efficient with system resources as well.

Windows NT offers many of the same advantages that Windows does, as well as being available on the Digital Alpha processors. And the entire Windows family unquestionably enjoys better application support today. Yet Linux outperforms Windows NT on almost all comparable tasks as a server, and does not have costly licensing terms attached. Recent benchmarks of the Samba SMB server for Linux

show it outperforming NT as a file/print server by a ratio of at least 2:1 and often higher.

Linux Inclusions

Most Linux distributions include everything. Literally, you get the full operating system, mail, file, print, web, news, DNS, and all other required servers, utilities, development software including compilers, debuggers, libraries, editors, news, mail, and web clients, graphics environment and development tools, and literally hundreds of other packages. And whatever doesn’t come with the distribution is generally available for download off the web. While many of these packages are not as easy to install as their Windows counterparts, or may not be as “polished,” it is truly astounding how many applications and utilities are available, especially for server usage.

In addition, there are now a huge number of commercial vendors either supporting Linux or actively porting their software to Linux. Just in recent days, the list of vendors announcing support for Linux reads like a “Who’s Who” of the computing industry, including IBM, Computer Associates, Hewlett Packard, Corel, Netscape, Oracle, SAP, Informix, Ingres, Dell, Compaq, and Gateway.

Currently, Linux is very heavy on server applications and utilities, while end-user applications are lagging or less functional than their Windows counterparts. This is changing rapidly though, and I expect that in the next year we’ll see most major applications (except Microsoft’s) ported to Linux. And with the improvements in ease of use and installation that are currently being addressed, it will be possible to run a computer (server or workstation) in which the software is completely free.

Limitations of Linux

It would not be fair of me to go on and on about Linux without addressing some of its shortcomings. The first major shortcoming perceived by most corporations is that there is no one company to whom they can address problems because Linux is not “owned” by anyone. Yet this particular shortcoming is actually an advantage, rather than a disadvantage. There are currently several different companies, including Red Hat Software, Corel, Pacific HiTech, and others each packaging distributions of Linux for resale. And each of them is offering 24 by 7 hours technical support for their version of Linux. So, you can

pick and choose among the vendors and be assured that any or all of them should be able to properly support your system, since they are guaranteed to have the source code. And if you're not satisfied with any of them, you also have the source code and are free to address the problem yourself, or with your favorite consultant.

As for technical support, besides the vendors listed above there are several companies offering telephone, email, and web-based Linux support including LinuxCare and LANshark Systems among others. So you do have the ability to pick the vendor offering that's right for you, and be sure of getting good technical support. Finally, there's the availability of support via the web, and via news groups. In 1998, *InfoWorld* actually awarded their "Technical Support Excellence" award to the on-line

Linux community for the breadth, depth, and responsiveness of this community to on-line support requests.

A more significant disadvantage of Linux, in my opinion, is its installation and maintainability. Currently Linux is relatively easy to install if you use one of the mainstream distributions on specifically designed hardware. It gets harder as you do more out-of-the-ordinary setups or if you want to use legacy hardware or unusual hardware. And Linux does require Unix knowledge, which may be out of reach of some network administrators. In my experience, though, most network administrators are fully capable of learning Linux given proper training. The Learning Tree is one company developing Linux-based training, and there are several Linux certification's being developed by Red Hat, Caldera, and independently.

LINUX WWW RESOURCES

There are too many Linux World wide Web sites to list a comprehensive selection, but here are a few that should help you get started:

<http://www.calderasystems.com/index.html> Visit this site if you're looking for answers to questions, technical errata, or news about OpenLinux. This site features Caldera's OpenLinux distribution, which includes the StarOffice suite of applications, DR-DOS, the ADABAS-D relational database, and various Netscape clients and servers.

<http://sunsite.unc.edu/LDP> You can find most of the answers you need through the Linux Documentation Project (LDP).

<http://sunsite.unc.edu/LDP/hmirrors.html> Lists other computers (or mirrors) with the LDP contents

<http://www.calderasystems.com/support/techguide.html> Visit this site for technical errata about OpenLinux

<http://sunsite.unc.edu/LDP/products.html> Browse this site for pointers to sites featuring commercial Linux distributions, X software or preconfigured desktop and laptop computers with Linux preinstalled.

Of course, there are many numbers of sites devoted to Linux-related software, trivia, and other errata:

<http://counter.li.org> navigate to this site and register as a Linux user if you want to see an estimate on the number of people who use Linux around the world. The latest estimates are twelve million users worldwide.

<http://pobox.com/~newt/> Looking for a certain Linux logo? this site has a link to three pages of logos for Linux

<http://visar.csustan.edu:8000/giveaway.html> Have extra copies of old Linux distributions on CD-ROM you'd like to give away or donate? Navigate to this site for more information.

<http://www.cdrom.com> Walnut Creek's Web site is a great starting place to get other free Unix distributions, such as BSD or Slackware Linux.

<http://www.cs.utexas.edu/users/kharker/linux-laptop> This site is the definitive Web site for Linux laptop users, featuring many different links and documentation to solve problems and provide solutions to making Linux and X11 work correctly

<http://www.cviog.uga.edu/LinuxBleed.html> Want the very latest Linux kernel? Navigate to this site to learn about up-to-the-minute changes.

<http://www.debian.org> This is the definitive site for downloading the Debian Linux distribution.

<http://www.emry.net/webwatcher> Want to know whether your favorite Linux Web site has been updated or new software uploaded? Use this site to watch for daily changes.

<http://www.infomagic.com> A long-time distributor of Linux, Infomagic offers many different sets of software collections available by FTP or on CD-ROM

<http://www.kernel.org> This site not only offers the oldest and newest kernels, but also more than 20GB of software for Linux

<http://www.mcp.com> This site is the place to start looking for Linux books published by Sams, Que, and New Riders.

<http://www.rahul.net/kenton/index.shtml> Ken Lee's X and Motif Web site with more than 700 links to different X Window System Web pages (Ken is the maintainer of the Motif FAQ)

<http://www.ssc.com/lj> Home of the Linux Journal, a four-color, 70-page-plus monthly magazine all about Linux.

<http://www.xfree86.org> The great folks of the Xfree86 Project, Inc. provide free distributions of the X Window System not only for Linux, but for operating systems on other computers

Probably one of the biggest disadvantages of Linux today is the speed at which it is being developed. Some of the newer parts of the system are changing on an almost daily basis, and stability has suffered in those areas. But it

is entirely possible to avoid most of those areas until they stabilize, and that is what I recommend you do. Use Linux for tasks and applications that are already well understood, and for which it is well suited, and avoid bleeding edge stuff for the moment.

Finally, there is a serious lack of qualified Linux support personnel, and similarly a lack of good Linux systems VARS, integrators, and other consultants. Find a good systems consultant to assist you with your Linux projects, and cultivate them so that you'll have the expertise available when you need it. Plan to supplement that with training for your staff and you should have no problems implementing Linux in your environment.

Who's Using Linux?

There are a surprising number of large and small companies using Linux today. Linux is very big in Internet Service Providers, where the reliability, scalability, Unix/Internet compatibility, and cost are deciding factors. But Linux is also being used in companies as diverse as Cisco Systems, Fluke Corp., Virginia Power, Sony Electronics, Amazon.Com, Mercedes Benz AG, Yellow Cab Service Corporation, BellSouth, US Food and Drug Administration, Burlington Coat Factory, and many others.

Over half of all the web servers on the Internet are running the Apache web server, which was originally developed on Linux. Many companies are currently using Linux "under cover" in the back room, or in web servers, or in special projects, which don't have the visibility of "high profile" projects.

What is Linux's future?

Linux appears to be very strong, and growing stronger every day. New companies are announcing support for Linux applications on a daily basis. In 1998, Linux server installations grew by 212 percent, greater than any other operating system, according to IDC. And the Linux desktop is just now poised to take off, as

vendors bring Linux applications to market over the next 6-12 months. If you're not at least looking at Linux, and considering where you might use it in your organization, you're behind the curve.



DOS to Linux Commands

DOS	UNIX	DESCRIPTION
attrib	chmod chown chgrp	Change permissions or ownership of a file
backup / restore	tar	Change a backup or archive backup/restore
cd / chdir	cd	Change directory
chkdsk	df du	Report on disk usage
comp	diff cmp	Compare files or directories
date/time	date	Set system time and/or date
dir	ls	List a directory
erase/del	r m	Remove a file
exit	exit	Exit the current shell
fdisk	fdisk	Define disk partitions
format	mke2fs format	Format a file system or disk
find	grep	Search for text inside files
md / mkdir	md	Make a new directory
mode/tty	stty	Set modes on console, or serial and/or printer port
more	more less pg	Display output screen by screen
print	lpr	Print a file
rename	mv	Move or rename a file
rmdir	rmdir rm -r	Remove a file directory
sort	sort	Sort a file
type	cat	Display a file on screen
xcopy	cp -r	Copy files and directories recursively

Tips and Tricks

by EdKrach, CNP

Start Menu Folders

Do you wish you had a Control Panel, Dial-Up Networking, or Printers folder right on your Start menu, so that when you selected it, a pop-out menu of all items inside appeared? Follow the steps below to add any one of these folders (or all three) to your Start menu.

Right-click the Start button and select Open. Inside the Start Menu window, right-click a blank area and select File, New, Folder. Type ONE of the following names, depending on the folder you want to create:

- Control Panel. {21EC2020-3AEA-1069-A2DD-08002B30309D}
- DUN. {992CFFA0-F557-101A-88EC-00DD010CCC48}
- Printers. {2227A280-3AEA-1069-A2DE-08002B30309D}

Then press Enter. (Tip: To save on typing, carefully copy and paste the name from this e-mail.) You'll know you've been successful if you see a folder with the appropriate icon and name.

Tracking Down Drivers For No Name Peripherals

If you have a peripheral component for which you can't find the name of the manufacturer anywhere on the component, all is not lost. At the DriverGuide.com web site you can identify a component's manufacturer by using the FCC ID.

The FCC ID is a set of numbers issued by the U.S. Government that is on almost every piece of computer equipment. You can enter this number in the U.S. Government FCC Database Search Form on the DriverGuide.com web site and learn who manufactured your component. Once you do, you can use the DriverGuide.com's four-step procedure for locating the driver.

Fixing File Associations

Launch *Windows Explorer* or *My Computer* and locate the data file you need to associate to your application. Then, hold down the [Shift] key as you right-click on the file. When you see the shortcut menu, select the *Open With* command.

Once you see the Open With dialog box, select the *Always Use This Program To Open This Type Of File* check box, as shown in Figure A. Now, scroll through the *Choose The Program*

You Want To Use list box and select the appropriate application.

If you don't see the application listed, click the Other button and locate the program on the hard disk. Once you've selected the program that you want, click the OK button to close the *Open With* dialog box and initiate the file association.

Using The UNC Format To Access NetWare Resources

You can open a file on a NetWare server using the Window's UNC format. In a NetWare environment, you'd use the syntax

`Servername/volumename:foldername`
This translates into Window's Universal Naming Convention formats as

`\\servername\volumename\foldername`


Determining Telephone Line Capacity for Modem Connections

Before purchasing a new high-speed modem, or to confirm location capacity, use the service provided by US Robotics/3Com. This service allows you to test the phone system in your area. You can use your current modem to conduct the test.

Use the HyperTerminal application to create a new connection to US Robotics Support BBS at (847) 262-6000. When HyperTerminal makes a connection, you'll be asked how you want to receive graphics. You won't need graphics for this test so press 'n' and [Enter] to answer no. Next, you'll be asked for a user name and will simply type "Line Test." Doing so will initiate the test, which will take up to a minute to complete. When it's done, you'll be told whether or not the phone system in your area can handle the higher speeds.

Your ISP will also need to support the higher speeds in order to access the Internet with a high-speed modem.

Ejecting a CD-ROM

If the CD-ROM eject button on your computer is difficult to reach, you can use a shortcut. Simply *right-click* on the CD-ROM drive icon in *My Computer* and select the *Eject* command from the shortcut menu. On some systems, selecting this command will allow you to close as well as open, the CD-ROM drive. 

Implementing and Supporting Microsoft Exchange 5.5 Exam Preparation(Part 2)

by RexMoffitt

Exam Details

Exam Name: **Exchange Server 5.5**

Exam Number: **070-081**

Number of Questions: **30**

Passing Score: **633/1000**

Time to take Exam: **90 minutes**

Standard or Adaptive: **Shortened Standard**

Certifications Exam Counts Toward: **MCSE elective, MCP, MCP+I, and MCSE+I elective**



What you need to know

- Ports, their numbers and functions
- How to recover deleted mail
- The REQMAIN tool and its options
- OST and PST files
- T1, T2 and T3 events
- Where to put database and transaction log files
- Replication
- Backup and restore options and methods
- Licensing
- Where to put and replicate public folders
- IMS
- How to import NetWare user accounts
- How to migrate user accounts from various other systems
- How to add and remove newsgroups
- Remote access protocols and methods
- Migration files
- How to import from an SQL database
- How and where to enable message tracking
- SMTP, IMAP, POP3 and LDAP
- SMTP forwarding
- Key management
- Server monitor
- How to upgrade from Exchange 4
- How firewalls are used to allow or restrict packet types, IP addresses, etc.
- Chat servers
- Intervals and retry intervals
- MSMAil and migrating from MSMAil

Important Site Object Properties for the Exam

DS Site Configuration Object

- General Page –
 - Tombstone Lifetime = how long you want directory to keep an object

before permanently removing it from the directory. Default = 30 days.

- Garbage collection Interval = after 12 hours, objects with EXPIRED TOMBSTONES are permanently deleted!
- Anonymous Directory Account = specify an account for anonymous access to the Directory

Information Store Site Configuration

- General Page – Use to enable message tracking, not enabled by default
- Top-Level Folder Creation – specify which users have permission to create top-level public folder using Outlook
- Storage Warnings – to schedule notifications when users have exceeded their storage limits
- Public Folder Affinity – allow users to make connections to replicas of public folders that exist in other sites

MTA Site Configuration

- Messaging Defaults page – very important for exam
 - RTS values:
 - Checkpoint size (default 30K): 30K of data are sent before a checkpoint is inserted.
 - Recovery timeout: The MTA waits 60 seconds (default) after an error occurs for a reconnection before DELETING CHECKPOINT INFORMATION and restarting data transfer from beginning.
 - Window size: how many checkpoints go UNACKNOWLEDGED before data transfer is SUSPENDED. Default is 5 (specify only if Checkpoint size > 0)
 - Connection Retry values:
 - Max open retries: maximum times that system tries to open a connection before a Non-Delivery Report (NDR) is sent. Default is 144.
 - Max transfer retries: maximum number of times the system tries to transfer a message across an already open connection. Default is 2 times.
 - Open interval: System waits 600 seconds before trying to reopen a connection **after an error**.
 - Transfer interval: system waits 120 sec

before resending a message across an already open connection AFTER PREVIOUS ATTEMPT FAILED.

- Association parameters
- Association is a pathway or gateway to another system. Can have multiple associations within one CONNECTION.
- Lifetime: Keep an association open to remote system for 300 sec (default) after you send a message.
- Disconnect: Wait 120 seconds after sending a Disconnect request before you terminate the connection.
- Threshold: There will be 50 maximum queued messages by default at one time to a remote system. After 50, the MTA opens another association!
- Transfer Timeout values
- What is the acceptable amount of time it takes to transmit a message
- Time is measured in sec/K, or how long a message can take to be transmitted across open association!
- The higher the sec/K, THE LONGER THE WAIT!
- URGENT: Wait 1000 sec/K before sending an NDR for urgent messages
- NORMAL: Wait 2000 sec/K before sending NDR for normal messages
- NON-URGENT: Wait 3000 sec/K before sending NDR for non-urgent message.

Site Addressing Values

- General Page – choose “routing calculation server” and “share address space with other X.400 systems”
- Site Addressing page – Exchange Enterprise Edition creates addresses for:
 - Lotus cc:Mail
 - MS Mail (PC)
 - SMTP (Internet)
 - X.400
 - Routing Calculation Schedule
 - Recalculate routing after routing change is made
 - Schedule can be Never, Always, or Selected Times
- Routing Tab
 - View and recalculate the routing table, e.g. add a new connector to the site

Server Configuration objects (Server Container on Left Side)

- Server Properties include:
 - a. Defining Server location
 - b. Configuring services to monitor with Server Monitors
 - c. Installing Locales for displays in

foreign languages

- d. Changing database paths to common files
 - e. Configuring Information Store maintenance schedule
 - f. Enabling circular logging
 - g. Making adjustments for Directory Service and IS inconsistencies
- Private Information Store container properties
 - Specifying item retention time limits
 - a. Set storage limits for all mailboxes residing on a server
 - b. Selecting a home server for public folders
 - c. Viewing logged on information for current users
 - d. Viewing mailbox information and usage statistics
 - Configuring Protocols container for a Server
 - Configure server to use site defaults
 - a. Configuring IMAP4, LDAP, NNTP, POP3
 - b. HTTP not configured here, only configured at SITE or USER LEVEL!!
 - c. Configure Authentication option and Anonymous Access
 - d. Determine MIME types used
 - Configuring Public Information Store container for a Server
 - Specify item retention time period and storage limits
 - a. Set age limits for messages in a public folder – can set for all public folders in Public Information Store or a REPLICA of a public folder in Public Information Store
 - b. Configure Public folder replication – 4 tabs involved here:
 - 1- Instances – configure servers which hold a replica
 - 2- Replication Schedule – configure default replication schedule for all public folders
 - 3- Folder Replication Status – current synchronization status of all public folders
 - 4- Server Replication Status – current replication status based on server
 - Directory Service object for a Server
 - By default, servers within a site are updated every 5 minutes.
 - a. Can manually force an update on General Tab, click “Update Now” (need more than one server in the site for this)



- b. Use Knowledge Consistency Checker to discover new sites and servers added to your organization (by default, it checks every 3 hours). Click “Check Now” on General tab.
- Configure Message Transfer Agent object for a Server
 - Override the default MTA name and/or password
 - a. Specify message size limits
 - b. Configure your Distribution List expansion
 - c. Configure “least-cost” routing between sites
 - d. View and/or manage your message queues (very important)
- Configure the system attendant object for a Server
 - Define how long message tracking logs will be kept on General tab. Logs are kept in \EXCHSRVR\TRACKING.LOG folder

Public Folder contents: a series of Message Headers, message bodies, and attachments contained within a public folder hierarchy. CONTENTS CAN BE DIFFERENT BETWEEN SERVERS!

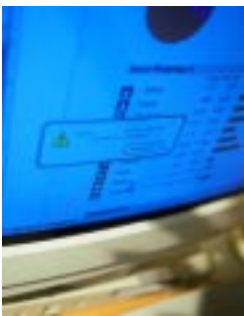
Monitoring and Maintaining Exchange Organization

- Know Database Types and Procedures for Maintenance Purposes
 - Exchange Server 5.5 uses Fault-tolerant Transaction based database for message information
 - Transaction log files can reconstruct data in cases of power outages or system failures
 - Databases based on 32-bit Joint Engine Technology or JET format
 - Maximum size of database for Exchange Standard Edition is 16 GB
 - Enterprise Edition size is theoretically unlimited, limited only by hardware used
 - Types of Files used in Exchange Server 5.5

Primary Transaction Log File: Hold transactions before they’re written to the DS or the IS, only 1 current transaction log per service!

Previous Log File: Keeps older transactions, not currently being used

Reserved Log File Two Log files, RES1.log, RES2.log, reserved for low disk space events



Public Folder Review

Created Two Ways

Exchange Administrator: Use Directory Import option (cant create public folders directly!)
Outlook client: File – folder – Create Subfolder

Components of public folders

Public Folder Hierarchy: the “tree-like” structure shown in Administrator that is replicated to all Public Information Store in an Organization (it’s “constant” between servers)

Rules for Public Folders

1. Public folders in the Public Information Store are recipients in the directory.
2. By default, public folders are hidden recipients, can only be viewed in Administrator.
3. By default, public folders don t appear in the Global Address List!
4. If you want to "balance the load" in your organization, then replicate your public folder to another server in the site or another site.
5. You can schedule public folder replication.
6. You can create dedicated public folder servers:
 - a. Create a PUBLIC SERVER one with a Public information store but no private information store.
 - b. Create a PRIVATE SERVER one with a Private information store but no public information store.
7. By default, all users can create public folders at the root or top level.
8. Create public folder FAVORITES or shortcuts to a folder to give quick access to a specific location in a large folder hierarchy. Note: USERS CAN ACCESS A PREVIOUSLY CREATED FAVORITE TO BYPASS ANY SECURITY THAT IS SET ON A HIGHER-LEVEL FOLDER!
9. You can configure PUBLIC FOLDER SITE AFFINITY to make connections to intersite public folder servers. Default: there are no public folder site affinities. You assign a "cost value" per site similar to Site Connector cost values. You only set affinity values AT THE SITE LEVEL, NOT SERVER LEVEL!
10. AFFINITY VALUES ARE ONE-WAY, AND THE LOWEST AFFINITY VALUE WINS!!
11. You can configure public folders at both the SITE and SERVER levels using Exchange Administrator.

Checkpoint Files: A “pointer file” – keeps track of transaction logs once they are committed to a database

Patch File: Temporary file – stores transactions during backup, used with ISINTEG utility for the Information Store

- UTILITIES Used to maintain Exchange Servers
 - Performance Optimizer – analyzes hard disks, run after SETUP
 - a. Analyzes hard disks
 - b. Puts components on different hard drives based on certain performance criteria
 - c. Modifies Registry parameters to improve server performance
 - d. File name is PERFWIZ.EXE – will affect behavior of DS, IS, MTA
 - e. Recommended drive configuration: 1 disk for software, OS, and paging file; 1 disk for transaction log files; 1 disk for database files using stripe set with multiple drives
 - f. Run this AFTER INITIAL SETUP OR ANY MAJOR CHANGE TO HARDWARE!!
 - g. Results are stored in %windir%\system32\perfoptlog
 - ESEUTIL – previously called EDBUTIL in Exchange 5.0 and earlier!
 - a. Checks consistency of IS and DS at JET engine level
 - b. Repairs any inconsistencies
 - c. Located in \windir\System32
 - d. Defrags and compacts the IS and DS
 - e. Use only with assistance from Microsoft (or risk data loss!)
 - ISINTEG – checks consistency of IS database
 - a. Use ISINTEG –FIX to correct any detected errors, need to specify one or more tests
 - b. ISINTEG –FIX –PRI –TEST all tests will fix all inconsistencies with Private IS
 - c. Use this utility only with assistance of MS Tech Support!
 - MTACHECK – checks data stored by MTA in data files (.dat)
 - a. allows for “soft” recovery of corrupt MTA database, e.g. C:\Exchsrvr\Bin>mtacheck.exe
 - b. Use when MTA service doesn’t start (run only when MTA service has stopped!!)

- c. Defective objects put in \Exchsrvr\MTA\Data\MTACheck.out for later review
 - d. Will rebuild MTA queue so MTA can start again
- SCANPST.EXE – Inbox Repair Tool
 - a. Can be used on Personal Stores (.PST) or Offline Stores (.OST) files
 - b. Will search for “orphan” folders and messages
 - RPC Ping
 - a. Included on Exchange CD, has a ‘server side’ and ‘client side’
 - b. Verifies RPC connectivity over a given transport
 - c. Three versions of the RPC Ping Client:
 1. Rpingc16.exe – to use with Microsoft Windows 3.x
 2. Rpingc32.exe – to use with Microsoft Windows 95/98 and NT
 3. Rpingdos.exe – to use with Microsoft MS-DOS
 - Forcing Directory Replication
 - a. Within a site – you PULL information to your server can’t broadcast this.
 - b. Go to Directory Service object, General Tab, click “UPDATE NOW”
 - c. Between Sites – go to Site Connector, Sites Tab, click “REQUEST NOW”
 - d. Also go to Directory Service object, General Tab, click “CHECK NOW”
 - Performance Monitor in NT – provides real-time monitoring of Exchange servers, objects are listed in chart below:



Performance Monitor in NT		
Objects	Counter	Description
MTA	Messages/Sec	Number of messages MTA sends and receives per second
MTA	Work Queue Size	The number of messages queued in the MTA for delivery to another server
MTA Connections	Queue Length	If this is large, it shows which connections are responsible for the large queue
Directory Service	Pending Replication	Shows how many requests for directory Synchronization have gone unanswered. Use this after clicking "Synchronize Now" on the DSA General Tab.

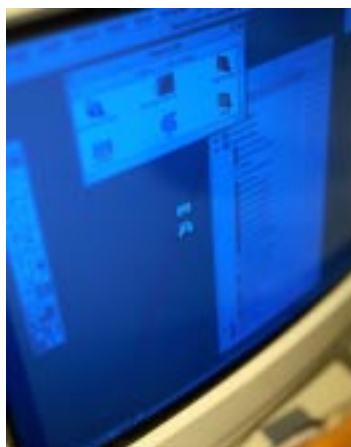
Built-in Performance Charts in Performance Monitor

a.	Server Health tracks percentage of processor time utilized by the core components, and Total percentage of processing time.
b.	Server History tracks number of people who have a connection to server and the number of messages in the queue that are not yet processed.
c.	IMS Queues tracks number of Internet messages queued inbound to server and outbound from the server. Updated every second.
d.	IMS Statistics tracks total Internet messages sent inbound to server and outbound from the server since the IMS service was started.
e.	IMS Traffic track messages as they move between MTS-IN and MTS-OUT queues, also the number of SMTP sessions both inbound and outbound.
f.	Server Load tracks load on the server by client activity (number of messages delivered, etc). Updated every 10 seconds.
g.	Server Queues tracks how many messages stored in server queues that are waiting to be processed or transmitted. Tracks latency issues, updated every 10 seconds.
h.	Server Users tracks how many users have a connection to the server.

Migrating to Exchange and Client Issues Review

(Final Section)

- Exchange supports migration from:
 - Microsoft Mail for PC networks Version 3.x
 - Microsoft Mail for AppleTalk Networks (Quarterdeck Mail) Version 3.x
 - Lotus cc:Mail–database version DB6 and DB8
 - IBM Professional Office system (PROFS)
 - Digital ALL-IN-1 versions 2.3 up
 - Novell GroupWise versions 4.1 and 4.1a
 - Collabra share version 1.x and 2.x
 - Lotus Notes Release 3.x, 4.0, 4.1
 - Lotus Domino server release 4.5, 4.6
- Types of migration
 - Single-phase – move all users in one small time frame
 - a. Use when you have little or no existing data
 - b. Use if all hardware and software needed is already in place
 - c. Avoid lot of coexistence issues and problems
 - Multi-phase – move groups of users in PHASES SPREAD OUT OVER MANY DAYS
 - a. Use for a large base of users
 - b. Use if not all departments can upgrade at the same time
 - c. Use if needed hardware is not in place for the upgrade



- Migration Process – using the Migration Wizard
 - One-step migration – DON'T CONFUSE WITH SINGLE-PHASE MIGRATION!!!
 - Data migrated using the Wizard, no changes made to addressing schema
 - Two-step migration – DON'T CONFUSE WITH MULTI-PHASE MIGRATION!!!
 - Data is first exported to migration files, then edited and imported using the Wizard.
 - Use if changes are being made to addressing scheme
 - MUST KNOW THE MIGRATION FILES FOR EXAM!**
 - Packing List Files – list primary and secondary migration files and CODE PAGE!
 - Packing list file is KEY TRACKING FILE
 - Primary Intermediate file – contains directory changes, message headers, pointers, etc.
 - Primary intermediate files can be edited using Notepad, BEFORE YOU IMPORT!
 - Secondary Intermediate File – contains message bodies and attachments!
 - Don't normally edit secondary intermediate files!
- Client Issues
- Exchange supports Outlook 98, Outlook 97, Outlook for Windows 3.x, Outlook for Macintosh,
- Outlook Express, Outlook Web Access also clients
- Outlook 97 only support POP3 and SMTP protocols
- Outlook for Macintosh supports S/MIME protocol
- Installation Issues
 - The Exchange Client for MS-DOS needs 2MB min/3MB max disk space, 1MB RAM
 - Outlook 98 client needs 22MB min / 81 MB max disk space, 8 MB RAM
 - If using TCP/IP for Macintosh, use Mac-TCP version 2.06 or up
 - If installing Outlook Express on Windows NT 4.0 with IE 4.0 and Standard / Full install, THEN install Service pack 3 or later!
 - Latest version of Outlook Web Access requires Exchange 5.5 with SP1 and IIS 4.0. Also need Web browser supporting frames, java applets, and MS Jscript on client!

- Outlook 98 can be installed in Corporate/Workgroup Mode or Internet Only Mode!

Installing the Clients

- Use Network client installation point – install the client to a local hard disk
- Use Shared client installation point – run Outlook from a server
 - Outlook 98 doesn't support shared installations!

Creating Profiles for Clients

- Outlook 98 requires a windows messaging profile listing the information services that are used
- Users can have multiple profiles with unique information services
- Use the Outlook Setup Wizard to create profiles
- Use NEWPROF.EXE to create a profile
 - It uses the OUTLOOK.PRF file in the Program Files\Microsoft Office\Office folder
 - OUTLOOK.PRF can be customized in two ways:
 1. Modify the Registry:
 - HKEY_LOCAL_MACHINE\Software\Microsoft\Office\8.0\Outlook\Setup\PRF
 2. Use EXCHANGE.PRF found in the Office 97 Resource Kit

Creating Profiles for Roving Users

- Use the PROFGEN.EXE utility – Microsoft Exchange Roving User Profile Generation Program
- Works with NEWPROF.EXE to create a profile from account information for the currently logged on user

Configuring the Outlook Client

- Preferences tab – e-mail options, calendar options, tasks options, journal options, note options
- Mail services – prompt for profile, enable offline access
- Mail format tab – message formats, fonts, creating signatures for outgoing mail
- Spelling tab – self-explanatory
- Security tab – creating digital Ids, encryption settings
- Other tab – emptying deleted items folder, auto archiving settings, preview pane
- Delegates tab – to configure “send on behalf of” access, or “send as” access for another user
- RPC Transport Issues on the Client

- RPC can use any of the following protocols:
 - Local RPC or LRPC
 - TCP/IP
 - SPX
 - NAMED PIPES
 - NETBIOS
 - VINESIP

- Client connection Order depends on operating system.
- Modify client connection order before or after Setup:

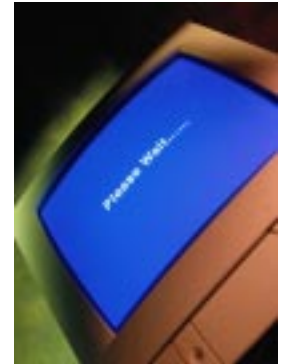
- **Before Setup, edit the Outlook STF file with Notepad**
- **After setup** Outlook 98 – modify HKEY_LOCAL_MACHINE_\Software\Microsoft\Exchange\Exchange provider and edit Rpc_Binding_Order value

Outlook 97 – modifies your OUTLOOK.STF file or modifies the same Registry key as above

Outlook for Windows 3.x – modify EXCHNG.STF file before setup or edit Rpc_Binding_Order in Exchng.ini file **after setup**

MS-DOS based client – edit the MLSETUP.INI file before setup or edit the RPC_BINDING_ORDER_environment variable in AUTOEXEC.BAT FILE after setup

- Create Personal Folder Stores for Clients
- To back up folders and messages
- To move messages and folders to a portable computer if working away from office
- To archive old messages and create space in Information Store
- .PST files have 2 GB limit or 64,000 entries!!
- Users can protect their .PST files with password but **this is only known to the user and can't be viewed or changed by and administrator.**
- Use the ODK or Outlook 98 Deployment Kit to create custom installations
 - Replaces Office 97 Network Installation wizard
 - Replaces manual editing of profile or .PRF file and setup or .STF files!
 - Includes MS IEAK customization features
 - Uses Active Setup technology and is installed from the ODK CD-ROM
 - Need to install IE 4.0 or later, and works with Windows 98/95, NT Server 4.0 SP3 and NT Workstation 4.0 SP 3.



Dress for Success

by Deni Berger

Watch the Way You Dress

Every day we all have to make the same decision. What should I wear today? Depending on what job you have will depend on how you need to dress. Some companies do not have preferences on how their employees dress for work, while others have guidelines that must be followed. Of course, different professions have different styles as well. You would not walk into a dentist office and expect your dentist to be wearing a suit and tie. Granted some dentists may be dressed in a suit and tie, but you would normally see them in scrubs. Likewise, you would not walk into a corporation and see the CEO wearing scrubs.

Everybody has a different opinion on dress. A few years ago I worked at a job in a call center. When I was first hired on, we were allowed to wear whatever we wanted. There were employees that came in sweats, shorts, you name it they wore it. New management was brought in there was a lot of disappointment when a business casual dress code was implemented. Many of us were upset that we would have to buy new clothes. People complained about not having a choice anymore and that we were only given one month to get a new wardrobe. The time finally came that we had to “dress up.” The outcome was unbelievable. As I observed from a lead perspective, I saw performance rise. It actually felt good to go to work. The company went from losing money each month to being extremely profitable, and management attributed part of that change to the way we dressed.

Making a Good Impression

We’ve all heard the saying, “Actions speak louder than words.” Well, guess what, so does the way we dress. The Beyond Computing

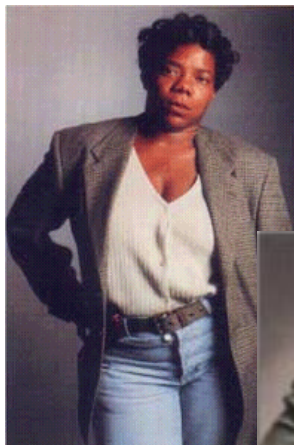
magazine featured an article by Dr. Edward Wakin. He believes that “Clothes talk before you say a word.” I agree with him. For example, I was given the assignment to take some shirts to the cleaners to get them pressed. When I entered the cleaners, the manager wasn’t dressed for the job. Yes this was the cleaners, but she was the manager. She was dressed in tight short shorts and a tank top. Immediately my impression of the company was lessened.

Had she been wearing even a nice pair of slacks, I would’ve felt better about leaving my shirts there.

What you choose to wear can play a significant part in what others think of you. Be sure to pick your wardrobe with care.

Many companies have dress down days. If

your company is one of those, be sure to wear something that you wouldn’t wear for a day around the house. A rule of thumb might be if you can work in the garden in your attire, then it is probably not suitable for work.



Clients tend to identify with birds of a feather. One of the keys to breaking down the barriers of a prospect is to make them feel comfortable and that you’re respectable. It’s rare that the three-piece suit types are going to feel an affinity with the shirt-sleeves programming community.

Similarly, the director’s office isn’t a place for a golf-course polo shirt. I’ve witnessed highly educated salesmen that could deal in the boardroom, but had no concept of how to talk to a female MIS director. Or the saleswoman who was cowed into abject silence by a roomful of rowdy help-desk men. The melt-down can work both ways.

Tom Henderson
quoted in
September 17 1997
Issue, *Canadian
Computer Reseller*

If It Doesn’t Fit, Don’t Wear It

Have you ever seen someone wearing an outfit that looked like it was painted on? For some reason there are people who think they need to impress the male population by wearing tight fitting jeans. To be honest, such people just make themselves look worse. If you want to look nice, wear clothes that fit. Likewise, clothes that are too big are also unprofessional. Of course, we all have preferences in what we wear. Some like their clothes too tight while others like their clothes baggy so that the clothes don’t touch them. Whatever your preference, be sure you know the environment that you will be in. If you are going to work at a circus, baggy clothes are a good choice. If you are in the business world, dress for success.

Men and Women—What's Right, What's Wrong

One question that you might want to ask yourself when you're getting ready for work or travel is "What would I think of someone in this same outfit?" If the answer is "Gross" then you might want to rethink your decision. Be mindful of what others around you might think. You don't want to offend anyone by what you wear. Here are a few things that are good and bad for men and for women.

Men-Do's

- P Neat Hair
- P Long-sleeved shirts if wearing a suit
- P Polo or button-up shirts, not faded
- P Clean and neatly pressed clothes
- P Dark suit with a good quality of fabric
- P If going business casual, khakis are better than blue jeans
- P Tie not floral or bright; stripes and geometric patterns work best
- P Clean shoes-neatly polished

Men Don'ts

- O Facial Hair-Keep it neat and trimmed
- O Saggy socks
- O Cologne No matter how good it smells, if we can smell you, it's too much
- O Gold medallions, charms, big bracelets
- O Tight jeans Just don't do it.



Women Do's

- P Clean, manicured fingernails
- P Polished shoes-low heeled or flat pumps
- P Suit in dark colors such as navy, gray and black
- P White, cream, light pink, or blue blouse
- P Button-up shirts
- P If going business casual, khakis are best

Women Don'ts

- O Extreme hair styles
- O Perfume or cologne
- O Short skirts higher than two inches above the knee is too high
- O Floral prints, especially in purple, lavender and hot pink colors
- O Lacy or low-cut blouses.
- O Excessive jewelry
- O Excessive make-up. Try to wear as little as possible. Natural is usually better

Summary

When you're ready to dress for business, make sure you do it right. Read books that talk about successful dress and follow their suggestions. Don't go overboard. There are many people that are extreme in the way they dress. Don't be one of those people. Be sure you are aware of your company's policies. When you dress appropriately, you will have higher respect from those around you.

<http://www.inpnet.org/NICs>

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NETWORK INFORMATION CONNECTION

is published by the Institute for Network Professionals

Prices Domestic \$100/yr (\$8.50 each)
Outside US \$120/yr (\$10.00 each)

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