Sharing Leadership — Learning to Delegate

by Darryl Alder

Many professionals confuse being busy with being productive, until the time comes for all leaders when something has to give. There is finally no more time or capacity to lead or direct anyone else. There are too many people to watch, too many tasks to do in the day, too many phone messages to get back to and too many e-mails to answer. The solution for leaders is to begin giving away some routine tasks and maybe even some supervisory responsibility. But sharing leadership and getting to delegation is not a simple matter for most leaders.

For example, let’s consider the case of Terry. This network administrator started off in a small, but steadily growing company about eight years ago. Over time the staff has grown to ten employees, so now supervision is part of Terry’s job. Together the team is a mix of certified network professionals and technical support staff who serve in a help desk function. In the past 6 months, Terry has noticed a number of the team members who seem to be losing interest in their jobs. Also, several of the more technical ones feel like the newer team members don’t belong in the same group as they do. These higher skilled staff have also started to hound the “newbies,” are disruptive at staff meetings (if they bother to come at all) and one of them is looking for a new job.

Terry is starting to worry about being an effective leader and why not? Nothing has changed. Terry still manages the entire network in the company, configuring workstations, installing hardware, optimizing servers, analyzing traffic, completing diagnostics, planning architecture changes, and serving as ultimate authority on all printers, faxes and the PBX. What’s more, Terry handles all vendor relations and IS equipment/software purchases. It sounds like Terry is the IS department! It’s a wonder that they aren’t all looking for work.

Though this scenario may not realistically represent the way things are at your office, delegating remains one of the most challenging and often resisted aspects of management. In Empowering Employees Through Delegation, Robert Nelson states, “Your ability to delegate is the most important skill you bring to the job. This skill, according to surveys of successful managers, surpasses even administrative, organizational, marketing and accounting know-how.

“Managers new to a job are often poor delegators. This is forgivable while they are getting used to their new responsibilities.

“But left uncorrected, poor delegating is ineffective managing. Before long, team members work down to your expectations.”

http://www.inpnet.org/NICs
What the Skill Can Do

Effective managers get things done through other people and more gets done because of it. Giving your team tasks and the authority to get the work done is empowering. They grow and develop toward their own greater opportunities. And chances are if your bosses see you sharing your leadership, they will trust you with better opportunities yourself.

To all jobs there is a management side and a task side. When we give away these tasks to subordinates, they grow in areas of management which are new to them and we have more time to work in our own management areas.

Since shared leadership enlarges the capacity of both the manager and the subordinate, there are great payoffs for you, your team and the company:

**For you:**
- When you delegate properly, exercise patience and monitor staff progress, you and your team will achieve more than you would otherwise.
- You will have more time for a few focused managerial activities. Things like:
  1- project planning
  2- monitoring team members
  3- handling personnel problems
- Things that no one else can or should do and you will do them well, rather than doing a lot of tasks poorly.
- You will increase your managerial potential by having someone trained to succeed you when its time to move into a new area.

**For your team:**
- Your staff will become more involved in defining and completing projects
- Motivation to complete tasks successfully will increase
- Opportunities for promotion will improve

**For your company:**
- Production increases
- Work is completed more efficiently
- Employees feel free to offer new ideas and suggestions for improvement
- Decision-making is augmented, making the organization more responsive to the marketplace

Understanding the Skill

So whom among subordinates do we choose? How can we be sure we will pick the correct person? Can we do something now to begin preparing someone to take over our job? Blanchard and Hersey suggest a situational approach to sharing leadership. This model presupposes you will want to fully delegate a task. The best way to do that is to follow a four-stage progression as shown below:

Excuses for Not Delegating

Managers make all kinds of excuses for not delegating. Here are some of them:
- My employees lack the experience
- It takes longer to explain than to do the job myself
- Employee mistakes are costly
- As a manager I get things done quicker
- There are some things I shouldn’t delegate to anyone
- My people are specialists, they don’t see the big picture
- My employees are already too busy
- My employees aren’t ready for more responsibility
- When I delegate, I lose control over my employees performance
- I like to make my own decisions and keep busy
- Delegating terrifies me

Taken from *Empowering Employees Through Delegation*, by Robert B Nelson

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increased willingness to try aspects of it on their own. Decisions are still made by the leader, which your must “sell” to the associate to get cooperation. Teaching continues to be part of this style, though inspection and reaction to performance play a greater role. Relationships between leader and follower are as important as getting the job done. Some tolerance for “other ways” and new processes are tolerated as you begin to focus more on the “why” and less on the “how.”

3. **Supporting.** The leader recognizes the subordinate’s ability to do the task and wants to help increase their desire to do the job. They give each other feedback, but followers use more and more of their ideas in establishing the process or “how” of the task. The leader may suggest a tentative decision or plan and get a reaction from the associate. Having consulted with the associate, the leader may still have to make the final decision, usually based on team consensus. If consensus cannot be reached, the group is encouraged to note and follow the desires of the majority. The leader is seen now more as a helper, encouraging, rather than teaching. Relationship should be at its highest level, with focus away from the task and more on the peoples’ needs and feelings. Empowerment and trust should be the leader’s focus.

4. **Delegating.** The leader identifies the problem; sets certain guidelines, boundaries, or rules; and then turns the problem over to the associate; recognizing that responsibility remains with the leader. The leader entrusts the matter and recognizes this as an investment for the follower, the company and themselves. You need to give full authority to complete the task, including power to spend within the budget, seeking assistance from other team members or representing the initiative outside the company. The leader accepts decisions of the associate as long as they fall within the boundaries and guidelines established. Both the leader and follower have high trust and confidence in one another based on past relationships.

It’s important to recognize that no single leadership style is “best.” Each depends on the individual situation, the experience of the associate, and the tasks to be done. As leadership styles move from directing to delegating, the subordinate’s participation increases. When associates share in decision making, they gain a clearer understanding of the job to be done, are empowered, increase their abilities and feel satisfied. The leader’s flexibility in the use of different leadership styles will help associates succeed.

**Putting the Skill to Work**
In her book *The Organized Executive*, Stephanie Winston suggests we start by making a “delegation audit.” List all the things you do daily, weekly, monthly and annually. Break them into one of three columns: tasks that can be fully delegated, ones that can be partly delegated, and finally, tasks that only you can do. Many recurring tasks can be delegated, as can detail work. Offering to let an associate represent you at a meeting or testing the skills for a future assignment, can be a real perk for staff. However, don’t delegate tasks you don’t understand completely. Hold on to strategic planning and personnel matters.

The next step would be to ask the questions: Can they do the task? Will they do the task? Once you have answered the questions decide on the style you will use and make a plan to share the project.

Next, meet with your associate to define and clarify the job. Set standards and checkpoints. Then have them record their understanding of the project in a memo to you. When you are sure they have understood, give them the authority to act on their resource and support needs, including any training necessary.

Delegate for results and not for methods or processes, unless absolutely necessary. Evaluate progress periodically and reward good performance or make course corrections. If you want exceptional performance to continue you must recognize and reward it. Use salary increases and promotions when they are available. Other times, use merchandise, days off, public recognition, flowers or a sincere thank you.

**Summary**
Delegating should be prefaced with good direction, coaching and support by leaders who intend to share leadership. Many routine tasks can be given to a team member who will see such work as a chance to grow. By delegating a wide variety of assignments, a manager trains team members and prepares new managers at the same time. With this flexibility, managers are assured that any project will continue in their absence. There are great rewards for team, company and self when you share leadership.
Though BRAINSHARE ‘99 began on Sunday with a Partner Solutions Showcase and Welcome Reception, Monday’s Keynote was the official start with Dr. Eric Schmit. As Novell’s Chairman of the Board and CEO, he welcomed the 6,700 attendees to the 15th annual conference amid applause and cheers.

Tim Wolf, a member of the Institute and Systems Engineer from Mason Ohio said, “It has been four years since I have been to a BrainShare, and I must say that I do not remember seeing so much excitement in the earlier ones. I feel that Novell is on the way back. I heard several people talking about how their company or customers, that had switched to NT, were now in the process of bringing back Novell to either coexist or replace NT.”

### CEO Keynote

In his keynote, Schmidt reviewed progress made on Novell’s products during the past year and he recounted a recent survey showing, “ManageWise pays for itself in less than 20 days.” He also told the audience, “GroupWise now has 17 million seats. It’s growing faster than anybody else’s product, and it’s the only product in its category that’s integrated with the directory. Progress!

“NDS for NT allows you to replace the domains that don’t work very well in NT. We just shipped BorderManager 3, which has 5 million users. It is the largest installed directory-enabled security management suite, and with our 5 million caching users, Novell is the leading caching vendor on the market. Furthermore, we are the only vendor that is certified by the ICSA which is the certification body for this sort of thing.” He mentioned Z.E.N. Works and announced plans for 10 more directory-enabled applications in the next year. This included Sequel Integrator which, according to Schmidt, “allows you to put your databases wherever you want to and use NDS to manage them and bridge between the databases in your organization. All of a sudden you’ve got some choices that you didn’t have before.”

It was obvious to anyone in the audience that there is a new spirit in the company and among many users. After such unbridled enthusiasm by Novell’s CEO, it was easy to see why we got member comments like this one from Christopher Marini from San Leandro, California. He said, “When I left Monday’s keynote session, I felt the entire trip was already paid for. Between Eric Schmidt’s address and the demo’s that were shown, I was ready to go back to work.” Marini went on to say that his cumulative experience from the presenters of the 19 technical breakout sessions he attended, made the overall event “incredible.”

Schmidt also disclosed a Davis report that showed four times as many small businesses use NetWare as NT. But even though NetWare remains at the core of Novell’s strategy, during the week it became clear that the directory is the company’s real enterprise platform.

Novell’s latest version of NDS (NDS 8) code-named SKADS, for “Scalable Kick-Ass Directory Service,” was featured in an NDS directory with a tree of 1 billion objects. Steve Hynzy of New Horizons in Brookfield IL stated, “The conference was a wonderful showcase of Novell’s leadership in the field of networking. After the conference, I had a renewed outlook for my future and Novell’s in the networking world. NDS version 8 promises to add a lot to the already great product. The other industry leaders, that were there to showcase their product ties to Novell’s NDS, increased my confidence in Novell’s continuing growth.”

Schmidt summarized his keynote remarks by saying, “We at Novell had to learn this lesson the hard way, and we learned it very well. Customers want multi platform, heterogeneous, fully interoperable solutions that work.

“If our vision prevails, Novell does not triumph at the expense of others… As complex as things are today, they’ll become even more complex tomorrow. We need solutions that hide that complexity, give you the scalability, and give you the control over what you’re looking for as you manage and empower the networks that you run. We have made a very good start, we’ve made it this far because of your support, and because of your help, and with your help, I’m absolutely confident that we can deliver and finish the job.”
Dave Fry, CIO of his firm in San Jose California said “Eric Schmidt’s attitude towards the Novell Family will build it back into a strong leader in the Networking Universe.” Fry also thanked the Institute for facilitating a BrainShare discount and for the special edition member shirt (see http://www.inpnet.org/shirt for details on how you can get one too).

**Savings, Shirts & New Members**

Following the keynote, Institute staff distributed these shirts to many of the 110 Institute members who took the offer of a discount on their attendance (this saved our members who attended over $42,000)! By evening there were a hundred walking advertisements spreading the word about Institute’s services. Thanks to all of them, 75 people joined our ranks or renewed their membership while at BrainShare.

One of those new members, Kenneth C. Libutti, a CNE and CNI, is the Educational Technology Coordinator at Broward Community College in Davie Florida. He said, “This was my first year at Brainshare and to say I was awed is putting it mildly. It was so great to have access to the folks who write the software I work with every day and to get the kind of information only they can provide. It was also great to see what Novell has planned for the future and to have some hands-on with some of the new software. I appreciated having the opportunity to network with vendors and partners such as your organization.

“I decided to join the Institute for several reasons. I see it as an excellent tool for me to do my job and another great industry networking method. Of, course the discount on next years Brainshare did not hurt either!” Libutti has already given Network Professional Technical Resource CDs to the technical support staff where he works and has, according to his report, “extolled the virtues of joining the Institute to them all.”

**Wrong Shirt**

At Millennium Magic, the big conference party held at the Delta Center on Thursday, the prize patrol caught up with twenty members who sported Institute shirts. Each won software prizes and James Ping won the Grand Prize, a Cybex Duette Commander. But not every shirt was a winner, just ask Ken Kupetsky of Holbrook, New York. He had on a look-a-like shirt, but when our staff turned him around, they said, “Oh no, you have on the wrong shirt.” Ken wanted to know what was going on. When staff told him, he joined the Institute the next day and got his shirt. Now as one of our newest members he enjoys all the services and benefits.

**Next Year’s Discount**

We did get a couple of suggestions about better hotels from members like one from Daniel Westacott who said of our discount, “it saved me $200.00 and what it cost me, was I got stuck out at the Holiday Inn, and that 6am train was plenty annoying. I would suggest that we start this puppy up sooner.” We intend to! So mark your calendars now for December 1st when we can begin registering our members for BrainShare 2000 (and we hope with another big discount too).

**CNE Completed in 52 Hours**

That same week, BrainShare '99 celebrated ten years of the CNE program. Novell published that, “Over 500,000 individuals have now been through our training programs, including more than 150,000 CNEs.” The newest was Dax Games, one of our members.

When James Ping realized he could save $445 from his department’s budget by taking the Institute discount, he included his colleague Dax Games in the big event. Dax, who has been in the industry for nine years, had in his own words, “very much wanted to attend.” He had attended two years prior when Netware 5 was in pre Alpha.

For him there were three big highlights:
- getting his CNE.
- Meeting the experts. He said, “I thought it was a good time actually talking to the people responsible for producing Novell products”
- And the variety of breakout sessions. He felt that there was “something for everyone, executives, developers and techs.”

Three and a half years ago he had taken four 4.10 core classes just to get the knowledge of NetWare 4.10. He noted, “I needed to do a much needed migration from 3.x to 4.x. The certification was not as important as the knowledge. Work and a perceived lack of time to study kept me from registering and taking the tests.” So he had never bothered to test for his CNE certification.

But by the third day of Brainshare however, Dax had completed all the tests. Though he was tired, blurry-eyed and stubble faced he was proud to be Novell’s newest CNE. He recounted, “Doing it so fast was not that difficult since I had been doing it so long, most of the things I had been doing kept the information fresh in my brain. Most of the tests I took, I took cold, no studying. I did study for Networking Technologies for about 3.5 hours and skimmed a book on Service and Support.

“It was very easy to do the testing at Brainshare. The VUE testing system and people made it very easy and enjoyable to take multiple tests in a day. I figured out the time from my first test to passing my last test was approximately 52 hours. I don’t think you could do that anywhere else.” We agree and who would want to? But then who gets Novell to promise them a check for $1,000 for getting their CNE at Brainshare anyway? Why none other than Dax Games and he said, “ if I get my MCNE by next Brainshare they’ll invite me out and pay me my way!”

http://www.inpnet.org/NICs

Ed Krach (left), Institute Technical Marketing Director, congratulates Dax Games following final CNE Test.
Packing it Up
Ready for Your Next Trip
by Deni Berger

Do you ever have trouble packing for a trip? Is it hard to decide what to include and what to leave at home? There are a few things that you might think essential and others that you don’t even think about until you are already at your destination. By then it is too late. It’s like going camping in the mountains during the middle of July. You probably think that you only need one blanket to keep you warm. After all, it is July right? Wrong. You have to remember that you are in the mountains and the sun does shine with as much intensity because of the altitude and the trees. PACK AN EXTRA BLANKET!

Be Prepared
The single most important thing you need to remember about packing for a trip is to be prepared. You can’t expect to stay dry if you don’t pack an umbrella during monsoon season. Be sure to check with the local news stations to see what the weather is. The Internet is a great place to look for weather conditions. My family lives in a town that is very small. There is not a local news station there but the weather information is on the Internet. Make sure you know the weather conditions so that you can pack accordingly. Being prepared for travel will help ease the stress that you may feel from taking the trip.

Make a List
By making a list you can be sure that you have everything that you need for your trip. A few things that you might need include:

- **Men**
  - Enough underwear to last the entire length of your stay. Some people use the hotel laundry when available. That is a great idea if you have the funds to do so. Otherwise, it is rather pricey and your best bet would be to just take a pair per day.
  - More than one pair of shoes. Preferably two pair. One pair to wear one pair to carry.
  - If you do not have to travel in business attire, be sure to wear something comfortable. If you choose to wear jeans be sure to wear them on the return trip. Jeans are very bulky and hard to pack.
  - Enough accessories to make your outfit look different each day. For example, it is not necessary to pack enough white shirts for each day. All you need to do is pack a few extra ties. If you’re meeting with different people each day you really don’t need to change your outfit at all. They won’t know the difference.
  - Be sure to pack clothes in neutral colors. They do not show the dirt and wrinkles as much.
  - Bring a clothes bag for your clothes that you need to hang up. Many times you will be able to carry these types of bags onto your plane with you.
  - Be sure to have your passport if you are travelling outside of the US.

- **Women**
  - Enough underwear to last the whole trip. One pair per day should do.
  - Enough socks or pantyhose for each day. If you choose to take pantyhose be sure to take extra pairs. Nothing is more embarrassing than putting on a pair of pantyhose on the way out the door and having a run in them. Be sure to have a spare.
  - Enough accessories to make your outfit different each day. It is much easier to
pack an extra scarf or piece of jewelry than it is to pack an extra outfit.

- Don’t pack your best jewelry. You would be disappointed to have it come up missing.
- If you have time to relax at your hotel, you probably don’t want to do it in your business clothes. Pack some leggings and a T-shirt or long-sleeve pullover.
- Pack clothes in neutral colors so the dirt and wrinkles do not show as much.
- Be sure to have your passport if you are travelling out of the US.

**Medicine and Accessories**

Carry medicine and cosmetics on the plane with you. Do not put them with your luggage. A good way to store medicine and cosmetics is in a Ziploc bag. They are small and help prevent spillage onto your more valuable items. If you are traveling outside of the United States it is essential for you to pack your medicine. It is hard to find good products in other countries if you are not familiar with the stores. Take some type of laundry detergent for emergencies. There are many sample-sized detergents that are easy to pack around.

Be sure to have enough money for the things that you need. Carry cash and credit cards with you at all times. Do not leave your purse or wallet with anyone, even if they are your friends. You never know when you will need an extra dollar.

Don’t forget to take your work-related papers, maps, etc. You will be frustrated if you do not have the documentation that you need. Packing your papers in manila envelopes helps keep all of your information together. Labeling your envelopes also helps to keep things organized.

Women need to check with the hotel to see what types of accessories they have. If there is a blow dryer in the hotel, you know that you don’t have to pack one. Women also need to check with the airlines to see what types of hair appliances they allow. Some airlines allow butane curling irons on board. This is especially helpful if you are traveling overseas.

**Confirm Everything**

Call ahead and confirm all of your arrangements. If you use a travel agent you can pretty much rest assured that all of your arrangements will be secure. However, it is still important to confirm everything. Call the airlines to confirm your flight and to check the time of departure. Many times the flights will be pushed back an hour or two, especially if you are travelling during the winter when weather conditions are bad.

Be sure to call the hotel to confirm your arrangements. It is always better to be safe than sorry. You will be very frustrated if you don’t know for sure when you can check in and if your room is in fact reserved.

**Summing it up.**

You will find that if you are prepared for your trip, you will not have the stress that you would had you not prepared. First, make a list of the things that you need to take and stick to it. Second, don’t save all of your packing for the last day. If you do, you might not be able to get all of your packing done in time; you may leave important things behind. Last but not least, confirm everything. Get confirmation numbers and names of people you talk to. If you do all of these things you will have a great trip. Happy traveling.
As I have said many times before, there is more and more information becoming known that strongly indicates that in most areas of the country, and for most people, there will be power at the rollover. The public declarations of the TVA and Avista and other plants around the country, coupled with the encouraging NERC report and The Canadian Electricity Association Report of 1/21/99, lend credence to the probability of power during the rollover.

The same can not be said for the goods and services that we have come to expect as our lifestyle. There will be some disruption in transportation and distribution of goods, as well as in the inventory of the goods themselves. Some companies will go out of business because of their inability to recognize the problem and deal with it. Some will have dealt with it in an inappropriate way and will find that they are unable to function. Some will not have the goods or services available from their downstream dependencies.

Sen. Robert Bennett, chairman of the Senate Special Committee on the Year 2000 Technology Problem, writing for Y2KTODAY on 1/27/99, http://www.y2ktoday.com/modules/home/default.asp?feature=true&id=736 says “We cannot know for sure what computing failures Y2K will bring, nor can we know what effects those failures will have on our economy. This is certainly not the time to begin bunkering down with propane tanks and money stuffed mattresses, but we should begin treating the century date change as the real, but manageable, crisis that it is.”

Part of your personal contingency planning needs to develop what your real needs are, and the extent that you are willing to go to in order to maintain those needs. In other words, you will have to define your existing life style and what the realistic alternatives are for you. Even with power and utilities, the very real possibility exists that the domino effect will kick in and we can find that many specific items will not be available because industries, or the local representatives of that industry, are not available.

Something as simple as a first aid kit, cigarettes, or sun tan oil might not be available to you. Maybe those companies are not compliant, or the local stores that carry them might not be able to open because of a rolling brownout or lack of deliveries because of a rationing of gasoline. Maybe the regional warehouse is closed because of lack of personnel to handle the shipments. You need to look at your real needs and evaluate what you need to surround yourself with for your continued comfort and survival. Moreover, we need to talk about more than just stockpiling some food and water. What we are really talking about, potentially, is a significant (although temporary) modification to your existing life style.

What will not work, or the degree to which things will not work, or the specific goods and services that might or might not be lost, is a mystery now and will remain one until late into 1999, if not until 2000. Since we can not really know what will not work, it is much more productive to concentrate instead on being prepared for what you have decided is your specific worst case scenario.

Be careful in your thinking for your contingency planning. In making up your contingency plans, you need to capitalize on the skills you have and stay clear of those situations requiring skills that you do NOT have. It would not be a good idea, for instance, to consider buying a farm unless you know what to do with a farm. If you are living in a private house and have a septic tank and other than piped in water such as in a lake or pond or stream then you are in a totally different position from the person in an apartment, in the city, on the 16 floor. Even a private homeowner with piped sewage will need to be making different contingency plans. How many people know how to percolate coffee on an open fire? How many people know how to make a fire inside a house or apartment that has no fireplace? How many people know how to use...
a sterno cooking stove or a camp stove with one or two burners? How many people know how to hunt? Take down an animal for food? Skin and butcher an animal? Cook or preserve raw meat?

If we really do have a significant modification to our standard of living during 2000, it will not be as a door slamming suddenly shut on 1/1/2000. We will lose goods and services slowly, over many weeks and months (if at all) and not during the first few days. It will take time to use up the pipeline. It will also take time to replenish that pipeline. Those goods and services that are slowly lost will also return slowly. The standard of living will ratchet slowly downward.

The National Guard, in their National Guard Magazine, said they do not expect there to be any major issue with Y2K. They are going to train for the worst case scenario. That’s what we always want them to do and for the same reason that the United States government has active plans and has trained for the invasion by foreign nationals, so the National Guard will train for potential panic situations in 2000. That’s just good planning. That is not the same statement as there will be panic so we must train. The statement is we will train so that there will not be panic.

In the latest edition of the National Guard Magazine http://www.ngaus.org/ngmag/main199.htm, in an article “Racing against the Calendar,” Col. Gerald Olesen, a support staff officer with the Wisconsin office of emergency management, “…is of the common opinion that Y2K will mean disruptions, not emergencies. “We’re going to have inconveniences, but we’ve got to stop thinking that we can’t live without computers,” he said. “If we take care of the emergencies, everything else will fall into place.” So, what’s the Guard to do? John Myatt, a Florida National Guard spokesperson said “We’re going to plan for the worst-case scenario: no power and lots of panic.”

Senior Master Sgt. Tom Tabashinski, a technical specialist with the District of Columbia Air National Guard, has led discussions in his own neighborhood. As a citizen airman, Tabashinski does not scoff at those who already are stockpiling necessities in their basements.

"The best way I can look at Y2K is in preparing for a storm," Tabashinski said. “Some people are going to be better prepared than others.” But Tabashinski warns against every-man-for-himself tactics that promote withdrawing your money and fleeing to rugged areas — which he notes will be the last to regain services if things like power and water shut down. “Don’t run to the hills,” he said. “Stay in your communities and work with them. We can’t go at this as an individualist.” If people stick together, Tabashinski says he is not too concerned about the Guard’s ability in handling Y2K.

In working out your personal contingency plans, remember what Senator Bennett and the National Guard are saying. Treat this potential problem as an unnatural disaster not unlike a hurricane or tornado or blizzard and prepare for 2 to 4 weeks of disruption. Talk to your local Red Cross and Salvation Army to find out their plans so that we can incorporate them into our contingency planning. Check out the FEMA web site. The description of our real basics comes to us from Susan Connery and her survival advice: “Shelter, food, water, and fire are our needs. All the rest are wants.” Her web site gives excellent advice on how to survive in the event things get dicey in your region. (http://www.members.home.net/shadow-scout)

Be prepared, not scared.

Howard Belasco is a networking professional with superior communication skills, proven experience and unique skills in network administration, project management, training, and end-user support. He is especially skilled in analyzing situations, developing plans, designing solutions and motivating people.

Howard has been working as an independent consultant since 1992. As a consultant he implements, maintains, and manages Microsoft and Novell networking solutions, as well as other projects requiring computer expertise. His most recent projects include working as the Year 2000 Project Manager for a Fortune 100 trading group, as a Manager of Desktop Services for a Fortune 100 food company, as a mentor for a Fortune 100 insurance company, and as the Senior LAN Coordinator for a major Northeastern hospital.

Howard is a former Chairman of the Board of Directors of The Network Professional Association. He can be reached via E-mail: howard-belasco@worldnet.att.net
Ok, it wasn’t Networld+Interop with its tens of thousands of attendees, but this year LinuxWorld was as quoted by Larry Augustine, president of VA research, a “coming-out party for Linux” With over 12,000 devoted Linux attendees, this was the first really big showing of the Linux community. The last Linux event had fewer than 400 attendees and only two registered press. This show had more press than the previous event’s total attendance.

The Linux movement continues to roll forward with almost weekly announcements coming from big IT vendors showing their support for the little upstart of an OS. During the keynote address by Linux developer Linus Torvalds, he used a graph showing the growth of Linux. From only 10 users years ago, to over 10,000,000 today with a growth rate of 10X per year, Linux is an OS to be reckoned with.

“[Linux] is no longer a small system; its up with the big boys, and they’re nervous, as they should be,” Torvalds said. Even though ten million seems like a big number, Microsoft’s penetration is over 250 million. But the growth rate still leaves Microsoft a bit worried.

For many, Linux’s Unix-like interface anchored by arcane command-line functions is a bit user-un-friendly. Lately a couple of GUI interfaces from Gnome and KDE are making the user interface much closer to what users are after. These new interfaces, coupled with new easy-to-use installation utilities are leading Linux into the mainstream.

**Linux Newsgroups**

- alt.os.linux
- comp.os.linuxannounce
- linux.redhatannounce

*or when no news server is available use www.deianews.com*

At the show Gnome and KDE were praised for bringing Linux to the masses. They are not quite the instant replacement for a Windows desktop, but they are getting very close. As a server solution Linux really shines.

Much of the penetration of Linux into the marketplace has been fueled by its acceptance and near domination in the Internet and ISP realms. Linux makes a great, stable, inexpensive solution for many Internet and TCP/IP services.

With giants like Dell, Compaq, IBM, HP, Corel, Oracle and others joining the Linux bandwagon, we’ll continue to see Linux grow and move into the server space. I recommend you all take a look at Linux and see how it will be affecting your future as a Network Professional.
Internet Explorer 4.0 Administrator’s Kit
Exam Preparation
by Rex Moffitt

Exam Details
Exam Name: IEAK
Exam Number: 070-079
Number of Questions: 70
Passing Score: 703/1000
Time to take Exam: 90 minutes
Standard or Adaptive: Standard
Certifications Exam Counts Toward: MCSE elective, MCP, MCP+I, and MCSE+I elective

What to Know for the Exam

- Minimum installation requirements
  Installation methods and steps
- Stages of the IEAK process
- Licensing
- Which ports are used in different situations?
- Where the Profile Manager retrieves configuration information from
  .INS files and what happens when users have personal and group memberships that conflict in ISP Mode
- What is kept when installing IE4 over IE3?
- What can be imported from Netscape to IE4?
- What is retained when installing from different sources/places?
- How AutoComplete works
- Differences between Active Desktop and the standard desktop
- Differences between NetMeeting and NetShow
- Roles
- Differences between POP3 and SMTP
- LDAP
- How to initiate calls in NetMeeting
- Which ports NetMeeting uses
- Software distribution and packages
- TCP/IP basics
- Differences between full and partial channel subscriptions
- .JS and .PAC files and how they are used
- How Active Channels are used
- Differences in ISP IEAK and Corp Admin IEAK
- How to setup schedules for automatic updates

Installation
Requirements:
- 486-DX66
- Windows 95: 8M RAM; 16M RAM with Active Desktop
- Windows NT: 16M RAM; 24M RAM with Active Desktop
- 39M disk space (Browser Only)
- 51M disk space (Standard Install)
- 64M disk space (Full Install)

IE4SETUP.EXE - Installs IE 4.0.
IE4WZD.EXE - Connects to MS-related web site to download the rest of the IE install package.
IE4SITES.DAT - Contains download site location information.
IEREMOVE.EXE - Used for emergency uninstallation of IE 4.0.
IEXPRESS.EXE - Used to make a *.cab file from custom Components.

Administrator rights are required to install IE 4.0 on Windows NT 4.0.

Any user can install IE 4.0 on Windows 95.

To uninstall IE 4.0 use the add/remove option in Control Panel.

Installation details are logged to \$WINDIR$\LOG.TXT, which is renamed for successive re-installs as \$WINDIR$\LOG.BAK.

Profile Assistant is used to store personal information for interaction with web sites requesting the information.

Configure the Windows Desktop Update component to auto update the web content and to give a web-like interface to folders, but not to subscribe.

To remove Windows Desktop Update component, select uninstall IE 4.0 then select WDC in the next succeeding window.
Temporary Internet folder and History folder cannot be deleted. To recover disk space adjust the size of the Temporary Internet folder on the general tab of Internet Options window.

Migration

Migrating from Internet Explorer 3.x:

Migration from IE 3.x will install IE 4.x files in the same folder as 3.x. IE 3.x and 4.x cannot exist within the same computer and O/S, due to conflicting registry settings.

Migration from IE 3.x will automatically import proxy settings, favorites, and cookies, but not plug-ins.

Migrating from Netscape Navigator 3.x

Migration from Netscape Navigator will import proxy settings, bookmarks, and cookies, but not plug-ins.

Netscape Navigator can coexist with IE 4.x within the same computer and O/S.

Channels and Subscriptions

Each Channel title must be unique.

.CDF file - Mapping file containing web site contents.

An .HTML page can contain any number of links to a .CDF file.

.CDF files allows webmasters to convert their web site into a channel, which allows information to be pushed to the subscriber.

ISP and ICP can only delete and add one channel using the IEAK Wizard. The Corporate Administrator is allowed to delete all of them.

Full subscription allows the subscriber to do off-line browsing of the web site.

Partial subscription notifies the subscriber of web site content changes.

Updates cannot take place more frequently than by the hour.

The Favorites menu is used to subscribe to a web site.

A single channel can be configured to update from multiple web sites.

Software Distribution Channel - Active channel used to distribute software updates. Information is specified for this channel in the Open Software Distribution section of the .CDF file.

Setting AUTOINSTALL="YES" causes the application to automatically be downloaded and installed.

Packages

Download site URL is the http:// address where the software is installed from.

The wizard will automatically append the folder IE4SITE to the URL.

A single custom-built package can contain up to 10 separate configurations and up to 10 download sites, but only for a single language.

Only one download site can be specified when using Install Package Silently.

When using silent installation, after installation, the package must reboot the user’s system using both Auto Reboot and Do not prompt user for reboot settings.

After the IEAK installation, and before running the Profile Manager, reboot the system.

Advanced Version Synchronization screen:

- Red - Component is missing.
- Yellow - Disconnected from Internet, AVS is disabled, or component is not current.
- Green - Component is installed and current.

Use the Synchronize button in the AVS screen to download the non-current components from the MS web site.

Modes

<table>
<thead>
<tr>
<th>Mode</th>
<th>Customization Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate Admin Internet</td>
<td>Windows desktop update component, security settings, and proxy settings.</td>
</tr>
<tr>
<td>Internet Service Provider</td>
<td>Additional programs &amp; scripts, dial-up settings, and server-based packages.</td>
</tr>
<tr>
<td>Internet Content Provider</td>
<td>Appearance of setup program directs users to Internet/intranet servers for downloads, language specific package, software distribution channel, and browser interface.</td>
</tr>
</tbody>
</table>

ISP license codes are a 10-digit code that enables the creation of the single floppy distribution, which allows customers to connect to the distribution server and download software.

When creating a single floppy distribution:

- Users require TCP/IP and RAS to connect to ISP’s Server modem.
- A single .ISP file is used to direct the user to the sign-up server.
- A unique .INS file is created dynamically for each user.
The ISP’s 10-digit license code is used as the licensing code when connecting via to the internet.

**INSTALL.INS**

INSTALL.INS - Stores options specified in the IEAK Wizard. Can be used to change the configuration of IE after installation.

The default location for saving the .INS file is the folder within the IE4SITE folder that contains the installation package. For English versions, the folder is \EN.

To create multiple packages with similar options copy the INSTALL.INS file to a new folder and use that folder as a destination for the new package.

IEAK Profile Manager is used to open and edit .INS files to be distributed with the login script in order to centrally manage and update the user browser settings whenever users login. The auto proxy files (.JS .JVS .PAC) can also be distributed in this way.

If you receive the “No Policy Files Found” error message when opening IEAK Profile Manager, the .INS file was not available.

The IEAK license agreement requires that distribution records are reported quarterly.

**Security**

<table>
<thead>
<tr>
<th>Zones</th>
<th>Default Setting</th>
<th>Add Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Intranet Zone</td>
<td>Medium</td>
<td>Yes</td>
</tr>
<tr>
<td>Internet Zone</td>
<td>Medium</td>
<td>No</td>
</tr>
<tr>
<td>Restricted Zone</td>
<td>High</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Zone Permissions:

Low:
- Prompts users for unsigned ActiveX controls.
- Prompts for Initialize and script ActiveX controls not marked safe for scripting.
- Allows signed ActiveX controls without prompting.
- Allows file downloads.

Medium:
- Disables downloads of unsigned ActiveX controls.
- Prompts for Initialize and script ActiveX controls not marked safe.

High:
- Disables download of signed ActiveX controls.
- Disables download of unsigned ActiveX controls.
- Prompts the user before submitting non-encrypted form data.
- Allows file downloads.

By default active scripting is enabled in all security zones.

In order of precedence, User profile -> Group profile -> Default User profile. Multiple groups are applied in order of group priority specified.

**Files**

SHDOCVW.DLL - Enables the browser to navigate the web, view HTML pages and link to favorites.
WININET.DLL - Processes ActiveX controls.
MSHTML.DLL - This is the engine that renders HTML.
URLMON.DLL - Processes URL’s to provide HTTP connectivity.

The following Files must be digital signed:
- BRANDING.CAB
- DESKTOP.CAB
- IE40CIF.CAB
- IE4SETUP.CAB
- FOLDER.CAB
- CHL.CAB

All .CAB and custom controls must be digitally signed for installation if they contain ActiveX components.

**NetMeeting**

Applications may be shared with other computers that do not have the applications loaded on them.

A NetMeeting call can be started using a computer’s network address, a computer name, an Email address, or a modem telephone number, but NOT using a user name.

NetMeeting supports both IPX/SPX and TCP/IP protocols.

To restrict a user from receiving video, use NetMeeting settings in IEAK Profile Manager.

System policies and restrictions in the IEAK Wizard using CONF.ADM can be used to remove the video tab in NetMeeting tools.
## Stages

<table>
<thead>
<tr>
<th>Stage</th>
<th>Stage</th>
<th>Content Provider</th>
<th>Service Provider</th>
<th>Corporate Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stage 1: Gathering Information</strong></td>
<td>Enter Company Name and Customization Code</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Select Language</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Select Destination Folder/Distribution Media</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

| **Stage 2: Specifying Active Setup Parameters** | Select MS Download Site | Yes | Yes | Yes |
| | Automatic Version Synchronization | Yes | Yes | Yes |
| | Specify Custom Active Setup Components | Yes | Yes | Yes |
| | Specify Trusted Publishers | Yes | Yes | Yes |

| **Stage 3: Customizing Active Setup** | Enter Active Setup Title Bar text and bitmap path | Yes | Yes | Yes |
| | Choose Silent Install | No | No | No |
| | Import Internet Connection Manager Settings | No | Yes | No |
| | Specify Installation Options | Yes | Yes | Yes |
| | Specify Download Sites | Yes | Yes | Yes |
| | Enter Version number, Add-on Component URL | Yes | Yes | Yes |
| | Specify Browser Installation Folder | No | No | Yes |
| | Decide to Integrate Web Desktop | No | No | Yes |

| **Stage 4: Customizing the Browser** | Enter Browser Title Bar text/toolbar bitmap path | Yes | Yes | Yes |
| | Enter Home Page and Search Path | Yes | Yes | Yes |
| | Enter Online Support URL | Yes | Yes | Yes |
| | Customize Favorites & Links | Yes | Yes | Yes |
| | Customize Welcome Message and Desktop Wallpaper | Yes | Yes | Yes |
| | Customize Channel Bar | Yes | Yes | Yes |
| | Delete Competing Channels | Yes | Yes | No |
| | Customize Software Update Channels | No | Yes | Yes |
| | Add Active Desktop Components | Yes | Yes | Yes |
| | Customize Desktop Toolbars | No | No | Yes |
| | Specify path of custom HTT files | No | No | Yes |
| | Specify User Agent String | Yes | Yes | Yes |
| | Set Auto-Configuration options | No | No | Yes |
| | Configure Proxy Settings | No | Yes | Yes |
| | Import Certificate Authorities/Authenticate info | No | No | Yes |
| | Customize Security zones and Content Ratings | No | No | Yes |
| | Select sign-up Method | No | Yes | No |
| | Specify path to Sign Up Files (.HTM and .ISP) | No | Yes | No |
| | URL of server script that generates .INS file | No | Yes | No |
| | Enter Dial-up Network Parameters | No | Yes | No |
| | Specify Logon Script File | No | Yes | No |

| **Stage 5: Component Customization** | POP3/SMTP and News Server Addresses | No | Yes | Yes |
| | LDAP Server Settings | No | Yes | Yes |
| | Customize Outlook Express Info Pane/welcome msg. | No | Yes | Yes |
| | Specify signatures to append to messages | No | No | Yes |
| | Set System Policies and Restrictions | Yes | Yes | Yes |

(1) CD-ROM and Multiple Floppies only
(2) CD-ROM, Multiple Floppies and Single Floppy
(3) Up to 10
(4) Add 1 Channel or 1 Channel Category
(5) Complete customization
(6) 1 Only
(7) No limits
(8) Chat and Internet Settings only
(9) Chat, NetMeeting, Internet Settings, and Outlook Express Settings
(10) Settings available for Chat, NetMeeting, Internet Restrictions, Internet Settings, Outlook Express, Web Desktop, Subscriptions
TCP/IP Troubleshooting

Ping ‘localhost’ or ‘127.0.0.1’ in order to confirm that TCP/IP is properly installed on a given system.

If it is possible to ping a TCP/IP address but not the Fully Qualified Domain Name (FQDN), check the DNS configuration and DNS servers for possible problems.

The NSLOOKUP diagnostic utility can be used to troubleshoot TCP/IP address/Host name resolution problems.

To view TCP/IP configuration:

- Windows 95 - WINIPCFG
- Windows NT - IPCONFIG /ALL

Network monitor can be used to view TCP/IP protocol statistics for a server from a workstation and also to capture and decode TCP/IP packets.

Miscellaneous and Components

Autocompletion functionality requires the History folder. Clearing the History folder disables the option of Autocompletion in the URL address bar.

Netshow: ASF, RTP Live audio and RTP WAV audio formats can create Streaming audio.

MS Wallet can be used to store name, address, and credit card information. It supports both SSL and SET security standards.

MS Personal Web server component is not a choice available in IEAK.

Authenticode 2.0 supports time stamping and verifies that a certificate is not revoked and is still valid for a particular site. Renew the certificate from Publishers and upgrade to Authenticode 2.0 (From 1.0) in order to avoid warnings from a trusted site.

IEAK wizard can enable only one POP3 or IMAP Server address for clients. If more are required they must be added manually in Outlook Express.

Multicasting allows bandwidth saving by sending only one copy to all users.

Unicasting sends individual copies of a single message to all the destined users.

Use custom welcome page - Select this option and specify appropriate URL.

Path of custom desktop wallpaper file - customize user desktop by specifying a .BMP, .GIF, or .HTM file.

For customer bitmaps, create the following directory structure:

- \CIE\ - Parent root for all files.
- \CIE\BITMAPS\ - Where custom bitmap files are placed. Place in directory prior to running IEAK Wizard.

The custom toolbar bitmap for Internet Explorer will be displayed in IE, My Computer, Control Panel and Windows NT Explorer. It will not be displayed in any application like Outlook Express, etc.

It is not possible to change the window border style in installation screens using the IEAK Wizard.

Signatures can be added to mail and news by using the Profile Manager or the Include a Signature Screen of the IEAK Wizard.

Auto-configuration files (such as .INS files) can be used with login scripts.

http://www.inpnet.org/NICs
What Institute Members Are Saying:

On BrainShare '99
I heard about the Institute group discount and seen the early bird discount from Novell. Had I not been able to get those discounts, I probably would have had to pass on the trip. I was able to keep my total expenses for the trip beneath the original conference registration cost; including airfare, rental car, lodging and food.

Brainshare '99 was absolutely spectacular, I will do everything that I can do from now on to become a regular attendee. In the past, I have attended Techshare events, and other Novell specific conferences but nothing like this. When I left Monday’s keynote session, I felt the entire trip was already paid for. Between Eric Schmidt’s address and the demo’s that were shown, I was ready to go back to work. Then you add the cumulative experience from the presenters of the 19 technical breakout sessions that I attended; covering everything from using ADSL with BorderManager to cool solutions for Z.E.N. Works. One of my colleagues aptly renamed the event “BrainDrain”. It was incredible. Of course, on top of that, there was great food and lots of free stuff.

Christopher W. Marini
CNP, MCNE, CXN, Certified NetAnalyst Architect
C.W. Marini & Associates, San Leandro CA

Great to meet the Institute staff at BrainShare. I plan to give an update to my local Cleveland group this April. We will also cover some Brainshare updates and explain the benefits of being part of the Institute. Keep up the good work.

Eric Alexander
Alexander & Associates, Hudson OH

The conference was a wonderful showcase of Novell’s leadership in the field of networking. After the conference I had a renewed outlook for my future and Novell’s in the networking world. NDS version 8 promises to add a lot to the already great product. The other industry leaders that were there to showcase their product ties to Novell’s NDS increased my confidence in Novell’s continuing growth. The events and shows after hours were very entertaining and I especially liked the Institute shirt.

Steve Hyzny
New Horizons, Brookfield IL

I had a great time at Brainshare and learned a lot. I heard about the discount via email. So far, the Institute membership has been very valuable to me. I use the CD’s extensively!

Yevetta Quintana
Lower Columbia Pathologists, Longview WA

“Brainshare was bigger than ever. I truly enjoyed access to more of Novell Consulting than ever before.”

Dave Fry CIo Fry’s Electronics, San Jose CA

We found out about it via email from Ed Krach. It meant a great deal to us as it saved our company a nice chunk of change. We look forward to continuing our membership in the Institute during the upcoming year. Thanks Again!

Pernell Taylor, Star Digital Senior Senior Systems Analyst, Norfolk Va

I found this event very pleasant and informative. I think, as instructor, that the outmost best of the event was that we were able to talk direct to the course material-writers, testmakers and others in the CNI lounge were I could meet colleagues and discuss our common problems. The discount was very good and I appreciate it.

Ivar Rylén, NetCenter, Sweden

This is my forth time attending BrainShare and I would tell anyone that this was by far the largest I’ve seen it. So large, that got booted out of my hotel because of oversells. I found many of the breakouts to be a huge benefit and others quite frankly need a lot of help. All and All, I am quite impressed with the direction Novell is taking and am anxiously looking forward to what lies ahead.

Charles King
Compaq Training Specialist, Spring TX

“I definitely want to return next year. Brainshare is a look inside what is happening at Novell, they show current product, new emerging technologies, and what their partners are doing. The breakout sessions give valuable information on ways to do things that will help your environment run more efficiently.”

Dax Games
Cardinal Solutions, Ft. Thomas Kentucky

On Technical Resource CDs
I just had a chance last night to look over this quarter’s CD and WOW! I found the new layout to be a nice, attractive addition. I especially enjoyed the new “unpacking” style. It made “unpacking” the right software easier and the directory structure less confusing to read when I am looking to install a particular piece of software. I found this Quarter’s CD a great addition to my growing toolbox. Continued great success and I look forward to next quarter’s CD.

David S. Pomerantz
Senior Network Engineer/MMC Project
Booz Allen & Hamilton, Inc., North Potomac MD

A Question for readers in Southeast Michigan
I am also thinking about getting our local group started up again. Is there anyone in southeast Michigan trying to do this besides me?
Thanks,

Lance Ecklesdafer, MCSE, CNE, CNP
Network Engineer, re:Sources, Inc.Troy, MI
248-458-8287 or lecklesdafer@macmanus.com

http://www.inpnet.org/NICs