How much is extraordinary reliability worth?

n early August, the Internet presence provider I use for most of my clients experienced some e-mail problems. According to the administrator, the problem was "a dictionary spam attack on that server." This is the kind of problem that can't be dealt with effectively in advance. All administrators can do, once they notice the problem, is take steps to block that specific attack.

The e-mail server was down for about 90 minutes one day and, in 2 or 3 shorter periods, for about an hour the next day. One client asked about other service providers. No matter that service had been virtually uninterrupted for months, that the failure was the result of an outside attack, and that the cost of moving to a new provider might be several thousand dollars and wouldn't improve reliability one bit.

Which is not to say that I don't sympathize. When e-mail is unavailable, we want it fixed and we want it fixed now. But I wonder if we haven't established unreasonable expectations.

The Internet is still running on technologies that are 30 years old and those technologies assume that all users are honest and ethical. When the Internet was established, that may have been a reasonable premise. Today, attacks are common, but technology hasn't caught up with reality.

What's reasonable?

t's easy to claim 99% uptime. A system with 99% uptime is unavailable 5256 minutes (87 hours 36 minutes, or a little more than 3.5 days) per year. About 14 minutes per day. Improve uptime to 99.9% and your system can still be unavailable for nearly 1 minute 30 seconds every day – 526 minutes per year. Most Internet presence providers promise 99.9% uptime, whether they charge \$25 per month or \$250 per month.

Add more 9s after the decimal point, and the cost increases. For operations such as airline reservation systems and banks, the goal is 99.999% uptime ("five nines"). That means the company has redundant hot backup sites running all the time because the permitted annual downtime is 5 minutes 15 seconds. That's about 863 milliseconds per day!

Telephone systems provide 99.999% uptime because the system was designed for that kind of reliability. Unless somebody digs up the phone cables, the system works 24 hours per day, 7 days per week, 365 days per year.

You can get this kind of service from your website provider, but it won't be cheap. Adding an extra 0.09% will cost at least \$15,000 more per year for a single basic site. Adding the final

0.009% could add \$100,000 per year. What's the cost of "military" (99.9999% uptime) systems? Don't ask!

Is 100% uptime desirable? Yes. No question. Is the cost worth paying? That's up to you. Most providers offer 99.9% availability. Which is a better deal: 99.9% availability for \$25/month or 99.9% availability for \$250/month? If you want 99.99% uptime, how much are you willing to pay?

My choice, and what I recommend to clients, is to take the low-cost 99.9% offer instead of the high-cost 99.9% offer. Your system will be unavailable occasionally, but you could pay 10 times the cost and see no performance improvement!

Adding 9s to realiability adds 0s to the cost. For 99.9% reliability, the cost is \$400 to \$3000 per year. At 99.99%, your cost will be \$10,000 or more. To obtain 99.999% uptime, plan on spending a minimum of \$100,000 per year for your own data center, multiple redundant connections, hot off-site redundant servers, and the people needed to run them 24/7.

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I'll save money and accept the occasional problem. **B**

Performance reviews

ong-time readers of this publication will recognize the name "A. J. Stinnett" from the *Corner on the Market* quotation that appears on the back page. I've had the good fortune to know A.J. for the past couple of years and am always impressed by his common-sense approach to management. He is president and CEO of The Stinnett Group in Dublin. At lunch one day we were talking about performance reviews and about how they can do more harm than good if they're conducted poorly, which is the way most performance reviews are conducted.

Consider A.J.'s approach to performance reviews:

the manager must accept the responsibility to manage the employees' performance. This begins by informing

the employees' performance. This begins by informing them of their duties with a written job description, task list, or similar document that describes their duties and tasks in somewhat general terms; interacting with them frequently to issue work assignments, solve problems, and track progress; and making repeated efforts to keep them informed.

Once people understand what to do, a manager must be certain that they know, understand, and accept the two rules of performance that fit every business: (a) do the job right the

first time, every time and (b) do as much work as is needed to be done. Wise managers will make these rules their own credo and gently let people know what is expected of them.

The next step is for the manager to observe the employees' performance to be certain employees are clear about their duties, are meeting the rules of performance and, most importantly, that there are no obstacles blocking their progress. People need to know help is close by.

Now comes the hard part: tracking and recording the performance of employees so decisions about them are not based on emotion, personality, or poor memory. A good way to do so is to record only the excellent or poor incidents of an employee's performance.

Tracking exceptions

o not record work that is satisfactory, acceptable, normal, or just solid performance. The reason to record only the excellent or poor incidents is that this is the information needed to decide who to trust with important work, who to train or develop, who to pay more, and who to retain or terminate. The performance should be recorded at the end of every week because managers often cannot remember what happened last week. Do not record activities or non-critical incidents. Share the performance information with the employee at the end of each quarter.

On the anniversary of the employee's hire date, the manager should prepare and present to the employee a summary of the year's performance. This is needed to recognize excellent performance, to discuss any improvement or training needed, and to let the employee know about any pay adjustment.

An effective way to do this is to write five short paragraphs that (a) summarize the duties, (b) summarize the performance standard, (c) summarize the performance record and your comments, (d) provide a statement of any training, development or improvement needed, and (e) restate the rules of performance. The discussion should be business-like and reassuring to the employee.

Write the summary in the first person and give a copy to the employee and place a copy in her or his personnel file.

A variety of intrinsic and extrinsic techniques should be used to recognize excellent performance. These include a sincere "Thank you for a super job," notes or letters of commendation or congratulations, periodic bonuses for extraordinary or sustained excellent performance, and occasional meetings to publicly recognize individuals or the entire group for outstanding accomplishments. A good manager serves as head cheerleader for the employees.

When an employee performs poorly and it is clearly not the result of a faulty procedure or obstacle, the manager should use the following 4-step counseling process to inform the employee of the unacceptable performance record and to give him or her a framework to accept responsibility and create a self-improvement plan. This process should be used during a business-like discussion and the employee must be treated as an adult:

Step 1. Summarize the duties and tasks assigned to the employee.

Step 2. Remind the employee of the rules of performance.

Step 3. Briefly summarize the poor performance record for a reasonable period.

Step 4. Ask the employee how the poor performance will be remedied.

Discuss performance, not personality

■or employees whose performance does not improve after ◀ a second counseling session and a reasonable period, it may be appropriate to consider ending their employment.

This process to manage performance has been installed in a number of companies during the last 20 years. In follow-up interviews, employees have voiced satisfaction with the process because they know where they stand, how to improve if needed, are appreciative of recognition for excellent performance, and feel they are treated in an equitable and consistent manner. Managers have also indicated satisfaction with using the process and stated that a minimum amount of time is needed to manage employee performance. &

Windows XP Service Pack 2: Coming Soon

ossibly before you receive this edition of Random Thoughts Microsoft will have released Service Pack 2 for Windows XP. The network administrator's version is already available and those who wish to download a nearly 300MB patch file and install it on a standalone PC can do so.

I'm recommending caution, though. If you've already installed all of the critical patches and you're running a firewall application such as Zone Alarm, you have little to gain by immediately downloading and installing SP2. And you may have something to lose.

SP2 has numerous good features and you will want to install it, but nothing is lost if you wait a few weeks and allow the early adopters to encounter whatever problems are caused by the installation.

SP2 includes a firewall and turns it on by default, but the firewall doesn't monitor outbound traffic. Something nasty could still arrive as an e-mail attachment and be installed by a careless user who opens every attachment that arrives. Once the bad application is installed, it could communicate with the outside world because Microsoft's firewall doesn't monitor traffic going that way.

Keeping a computer in good running order requires a little caution. And that goes for service packs, too. &

"Enemies
(also known as 'competitors')
never sleep."