

## Column: From Editor  
## Figures: NONE  
## File for Companion Disk: None

# The Blair Witch House Server

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In 1984, I wrote an article for the local PC Users Group newsletter making predictions by the year 2000. I don't have the article anymore (it was on PAPER, for goodness sakes!), but I still remember the gist of it. I was thinking of "small computers", and hypothesized that three form factors were limiting us.

The first factor was visual display. I predicted holographic technology would permit you to have a very small machine but still be able to view a reasonable sized image. Three-dimensional images would also be more realistic with holography.

The second form factor was the keyboard, or, more accurately, input. This one was simple. Voice recognition.

The third form factor was the amount of memory and storage space. I predicted some sort of wireless link via satellites, but I didn't have a clue that you'd be storing your data on the Internet.

OK, so my predictions were no big deal. We're getting close, right?

## Closer to Home

You've probably heard, in one form or another, of the Blair Witch Project – a teen movie that's one of the summer's sleepers. One interesting aspect of this movie (OK, for those of you who've not seen it, it's the only interesting aspect) is that it's the first, er, "mainstream" movie to be pirated via the Internet. The digital form of the movie has been circulating around the Web for a month or two now, and bandwidth and processing power is now such that many kids have been downloading the movie to play it, instead of going to the theatre, or making a copy of a copy of a copy of a videotape.

It was only natural, of course, for this to happen. Kids have been doing the same thing with music for a couple of years – today, it's not uncommon for the neighborhood 15 year old to have 1200 MP3 files on his PC. In fact, there are teenagers around who have never bought a CD – they're just downloading and swapping with their friends. The music industry, of course, is thrilled about this.

But it's different with video, right? I mean, the files are so BIG! Blair Witch, for example, runs about 4.3 GB. Do *you* have an extra 5 GB on your PC right now? And just how long would that take to download? Let's see, at 28.8... Seriously, on a cable modem, it's a half-hour download. That's no big deal. It's faster (and cheaper) than a trip to Blockbuster.

## Demands on a Server

So now let's think about this. We're right on the cusp of needing huge amounts of storage. My family may be unusual, but we've got hundreds of movies on tape – between everything that Disney has ever published <sigh>, the Total Arnold Schwarzenegger library, and anything that Sean Connery or Harrison Ford has shown up in, it's pretty easy to build quite a library. That's a lot of storage space if we were to store it digitally – close to 1000 GB – or, for those "big-data" freaks among you – a terabyte.

Add the music collection of a typical post-baby boomer (1000 CDs at 600 MB each wouldn't be outrageous), and you've got another 600 GB. But since you're downloading stuff instead of popping \$9 for a CD, you'll probably have more. I know I've started filling in the missing spaces in my Complete Meat Loaf collection.

We're not done, though. How many of you have boxes and boxes (and boxes and boxes and boxes) of photographs in old cardboard boxes? We've started digitizing ours – photos dating back since 1970. We're trying to use the best resolution we can without being ridiculous, so the resulting images are fairly good sized – only takes a couple of photos to fill a megabyte.

Finally, by the time you've got all this on line, you'll probably be storing your Word documents with Office 2002, and a typical one page document will require about 4 MB of disk space.

## My Prediction for 2010

I'm guessing that within ten years, many families will have a box in the basement with a few terabytes of storage. The house will be wired with cable like it's wired with electricity now. The server will talk to the

various TVs and PCs in each room, as well as to a couple of other mini-appliances, say, in the kitchen or workshop. And, of course, your phone, pager, camera, and PDA will be plugged in as well.

Some pundits predict that your refrigerator will monitor levels of milk, apples and ketchup, and let you know when you're running low – but until they invent kids who can keep a refrigerator clean, I don't think that's going to happen. But I've already started salivating about having two or three terabytes in the basement next to the furnace. Doesn't it sound reasonable, if you've got 25 years of photos on the family server, to be able to sit down in the living room with Uncle Jerry, pull out the infrared keyboard or mouse, and filter your pictures so you can see just those with him in the picture?

And doesn't Bill Gates' house seem old-fashioned now?

### **What's in it for You?**

So what's my point? Any half-wit can pundicize about a decade into the future – particularly with technology – since it's all essentially wild guesses. But here's the hook: Someone's got to write database applications that will track and manage all of this data....