Gates Touts New Secure Computing System

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 By MATTHEW FORDAHL, AP Technology Writer

NEW ORLEANS - Consumers shouldn’t be worried that Microsoft Corp.’s new security technology will wrest control of their PCs and give it to media companies, Bill Gates (news - web sites) said Tuesday. They can always choose not to use it, he said.

The Microsoft co-founder expects consumers as well as governments and businesses to embrace the system, which hard-wires security into silicon chips rather than just software. It’s designed to offer unprecedented levels of protection against hacking and eavesdropping.

"This is a mechanism that if people want to use, for example, to protect medical records, they can use it," Gates said in an interview with The Associated Press. "It’s a lot of work to do this stuff, and we think consumers will want those privacy guarantees. If they don’t want them, then fine, ask me about our other work."

The technology has raised eyebrows not only for the absolute control it would grant such creators of digital content as music and movie companies but also because it is being driven by Microsoft, which has a reputation for strong-arming the computer industry.

Gates spoke about the technology, known officially as the "Next Generation Secure Computing Base," at the 12th annual Windows Hardware Engineering Conference, where developers were getting their first look at it.

The technology is a key element of the software giant’s effort to create a more secure computing environment, which would be a tremendous boon, Gates said.

In the first demonstration of how the system would work, the company showed Tuesday how programs protected by the technology could not be altered or their communications intercepted by a malicious hacker, who happened to be played by a Microsoft worker dressed in a red T-shirt adorned with a skull.

But the demonstration was limited to attempts to rewrite simple programs and capture chatroom traffic. Many of the functions that will be built into hardware were emulated by software because the chips are not yet built.

The final version is expected to offer more control. Creators of top-secret government documents, financial records or other sensitive material could assign rights to sensitive files, allowing them to be viewed only on trusted computers running the system. Anyone else — hackers and malicious programs included — would be locked out.

The same platform could be employed by content creators — who include software makers like Microsoft. They could severely limit how materials are copied or even how long they last — a stark contrast from the freedoms of today’s computers.

Gates said the format of digital content is up to their creators, and Microsoft is only providing a platform on which record labels and movie studios — as well as others — can build. He said it’s in the content provider’s interest to use simple copy protection schemes.

"What you are seeing now is recognition they need to provide their content in easily accessible forms or else it ends up encouraging piracy," Gates told the AP.

He said Microsoft is not working in a vacuum on the project. It requires broad industry support to ensure secure channels across the computer.
The technology, formerly code-named Palladium, will create what amounts to a secure computer within a computer. Certain areas of memory, the processor and even the channels to the display, keyboard and networks are locked down and accessible only by trusted software.

In Tuesday’s demonstration, the separate elements work seamlessly with each other. The only difference to the end user was that in the unsecured version, the hacker could alter the program and view the data; in the secure version, he could not.

Intel Corp., Advanced Micro Devices Inc. and others are working on the hardware aspects, which are required before Microsoft can implement it into its operating systems.

"This won’t happen without Intel and AMD deciding both on the processor chip and the system design they’ll build these things in," Gates said. "And there’s even some work that needs to go in the video display and keyboard."

Users can opt to "turn off" the system when it becomes available, most likely in the next generation of Windows expected in 2004 or 2005. But doing so might well severely hamper consumers’ access to digital information that’s important to them — and which may indeed be necessary in their work environment.

Though no one doubts the need for better security, some have questioned whether Microsoft is best suited to be leading the charge, given its software monopoly and its history of skirting antitrust laws.

"They just don’t understand," Gates said. "That’s like saying because we make a word processor, that reporters write what we want them to write or something. I can give you examples to prove that’s not the case."

Some critics and competitors have raised concerns that the technology could be used to reinforce Microsoft’s dominance.

Secure documents created in Microsoft Office, for instance, could be unusable on other operating systems or with other office productivity suites.

In the interview, Gates said it’s up to other companies to ensure interoperability.

"I don’t know what’s going to be capable there. I don’t do the software on those systems," he said. "I don’t hold the keys. If they do the implementation, then it’s like saying they have the same features as every other thing we do in Windows. It’s up to them."