

Novel anti-virus for handhelds from India

December 27 2005

Imagine anti-virus software for handhelds that's less than the size of a typical PowerPoint file, needs no yearly subscription, yet it can protect mobile phones, PDAs, iPods or any other smart devices from not only known viruses but also all future unknown viruses and other malware.

It may sound too good to be true, but that's a new anti-virus product, an Indian software company based in Madras called Sanrasoft claims to have developed, which will hit the U.S. markets in 2006.

Sanrasoft, which announced last week a breakthrough anti-virus technology christened Rudra that right now is available only for Windows-based PCs, told UPI that a handheld version is already under development in its lab that will be launched in the United States a few months after Sanrasoft launches the PC version in April 2006.

"The R&D is already working on an application for handhelds and it will be so small that you wouldn't even know that it is there," said MS Bhaskar, the managing director of Sanrasoft and the inventor of this technology.

Rudra, according to Bhaskar, "is a breakthrough anti-virus technology based on the intention of malicious codes."

"This technology not only protects a device from known viruses but also from any unknown malicious codes (malware) which includes viruses, trojans, worms, spyware, keyloggers and hackers. Thus the technology offers a holistic solution."

The beauty of this technology, claims Bhaskar, is not only the fact that it is thin and that it can protect a handheld device from virus intrusions through any medium -- including Bluetooth -- "but since the technology protects a device even from future unknown viruses, the need for regular updates -- which increasingly encroaches on the limited memory space of handhelds -- as well as the need for yearly subscription, is removed."

"Current anti-virus products are based on older technologies, but virus writers are constantly inventing newer methods to transmit their malware," added Bhaskar. "Rudra protects a device from all methods that are unknown."

Bhaskar, who headed a 30-person developer team that worked for two years to develop this technology, says that Rudra's method is simple: It takes a snapshot of a device in complete detail in its malware-free state and continuously monitors system and file changes. New files, changes in configuration, changes in system control files and changes in critical application program files are all evaluated for potential threats. Any change in the system state that represents a potential threat is immediately acted upon.

Such surveillance then not only removes the potential threat but also restores the system to its original malware-free state, thus protecting devices against unknown viruses too.

The other two anti-virus technologies that are widely prevalent today are signature-based and heuristic-based. Signature-based, the first anti-virus technology developed about 17 years ago, which works by identifying the binary string (finger-prints) unique to each virus and updates its database, "is fundamentally flawed," revealed a research study two years ago conducted by Hewlett-Packard's labs in Bristol, England, "because viruses spread faster than anti-virus patches can be distributed."

Heuristics, though, identifies viruses based on the suspicious behavior, without the need for fingerprints. Essentially, this means that heuristics works on a set of loose rules and probabilities to spot suspect code.

This approach is considered to do a good job of catching new viruses. But there is a catch: It also tends to sound the alarm over code that turns out to be harmless. "Customers don't want any false positives," says Marius van Oers, an anti-virus research engineer at McAfee, the anti-virus software company. "It can cause panic."

On the other hand, says Bhaskar, Rudra offers a fundamentally different approach to virus and malware protection. "It identifies and removes all viruses from personal computers in their signature-unknown state," said Bhaskar, "and preventing any unauthorized program from executing on a device."

According Sanjay Bhardwaj, Sanrasoft's CEO, this technology has already been tested and certified by India's Ministry of Information Technology and is awaiting a patent filed with the U.S. Patent and Trademark Office under the Patents Conventions Treaty.

"The first product for PCs is ready, which will make its debut as a Windows-based anti-virus software product in India in January," says Bhardwaj. Shortly thereafter the product will be launched in the Asian markets -- mainly South Asia -- and "as soon as we have established it in the region and have gained customer confidence, it will be launched in United States," which Bhardwaj expects would happen in April 2006.

"And the handheld version of Rudra would be out by September by when we shall also be in a position to launch versions for Linux and Macintosh-based PCs," said Bhardwaj.

Although he declined to reveal his pricing strategies, he added that "the

price will be attractive enough to entice customers to be move away from other existing anti-virus products that require constant updates and yearly subscription."

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