Singapore team helps plug flaws in Apple devices

By FENG ZENGKUN

SINGAPORE had a hand in making the popular iPhones and iPads safer from malicious software programmers.

A group of eight researchers here found three security flaws in tech giant Apple's iOS operating system used in its mobile phones and tablets.

The vulnerabilities would have allowed hackers to design third-party applications which could crack the devices' passcode, block incoming calls or post unauthorised tweets.

The researchers alerted the American company. Apple corrected the problems before last month's global launch of the latest version of its operating system iOS7, acknowledging the work done in Singapore.

This behind-the-scenes patch was revealed yesterday by the researchers' institutes – the Agency for Science, Technology and Research's Institute for Infocomm Research (I2R) and Singapore Management University (SMU).

> **The improved data protection "will let iOS users use their mobile devices for leisure or work with peace of mind", said I2R executive director Tan Geok Leng.**

SMU's School of Information Systems professor Robert Deng said the eight researchers were spurred by the popularity of the iOS operating system.

"Some companies also allow their executives to use their personal devices for business, so some people will use the operating system to access business information," he said.

Between June and October last year, the researchers decided to focus their work on the iOS5 and iOS6 systems to find out if these were vulnerable in any way. Part of their work involved poring over documents given by Apple to software developers.

The team eventually showed that an app secretly carrying malicious code could bypass Apple's vetting process for apps and the iOS system's own security check.

To plug these security breaches, the researchers proposed ways to improve the operating system and the vetting of iOS apps designed by third parties.

Prof Deng said the eight researchers, who published a paper on their work, were happy to be acknowledged. I2R executive director Tan Geok Leng added that the improved data protection "will let iOS users use their mobile devices for leisure or work with peace of mind".

Apple declined to comment.

As of January, 500 million iOS devices have been sold worldwide and Apple's iTunes App Store has more than 800,000 iOS third-party applications, which have been downloaded more than 40 billion times.

✉ zengkun@sph.com.sg