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Hackers could gain access to passwords through USB sticks, cyber experts warn

By Sowaibah Hanifie

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Using a USB stick that's been left lying around is something many, if not most, of us have done — probably without thinking twice about it.

But cybersecurity experts are warning against the practice after showing hackers can access personal information through malicious USB sticks which then transmit that information remotely.

Researchers at the University of Adelaide have found removable USB sticks that have been tampered with can detect signals from other devices such as keyboards that are plugged into adjacent USB ports.

The sticks can detect keyboard strokes in a phenomenon computer experts call information "leakage".

Adelaide computer scientist Dr Yuval Yarom said through this means, hackers can detect passwords and other sensitive information.

"When you connect several devices to USB ports, one device can listen to the information that other devices send to the computer," he said.

PHOTO: USB sticks can be tampered with to detect keyboard activity and then transmit that information. (ABC News)

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"A malicious USB is able to listen to communication, to what your keyboard sends to the computer, and can acquire passwords."

75 per cent of lost USBs picked up and plugged in

Dr Yarom explained most computer wires are connected to a larger circuit, so a signal sent on one wire affects another.

He said hackers would need to modify the USBs to be able to access information through Bluetooth or SMS.

PHOTO: Researchers tested 50 computers for 'leakage' from USBs and found it was a problem with 90 per cent. (Supplied)

USB security concerns have been highlighted before, but Dr Yarom said the research is the first detailed investigation into "leakage".

The phenomenon was detected by Adelaide computer science student Yang Su and other research academics, who then tested the observation on 50 different computers.

They found 90 per cent of the computers leaked information to external USB devices.

Separate research by American universities found a 75 per cent likelihood a lost USB would be picked up and plugged into a computer and Dr Yarom said people need to ensure they completely trust the device they are using.

"It exposes another avenue that hackers might exploit. It's another risk security professionals should be aware of," he said.

The full findings will be presented to a computer security conference in Vancouver next week.

Topics: information-and-communication, information-technology, security-intelligence, sa, adelaide-5000