The “Liberty” Crack: The first Palm OS Trojan Horse
David Harris
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Introduction

A Trojan horse is identified as a malicious, security-breaking program that is disguised as something benign, such as a directory lister, archiver, game, or (in one notorious 1990 case on a Mac) a program to find and destroy viruses! This definition was created by MIT-hacker-turned-NSA-spook Dan Edwards.[1] The first “Trojan Horse” virus to specifically target the Palm OS computing platform is called the “Liberty” Crack.[2]

What is the Liberty Program?

Liberty is a popular application that emulates Game Boy games for the Palm. The Palm developer who co-wrote the original Liberty program is named Aaron Ardiri. Ardiri has actively campaigned against crackers who search for methods of breaking security codes for Palm games and applications. The “Liberty” Crack program was actually written by Ardiri to be a destructive Palm application disguised as a free version of the Liberty application.[3]

What is the Liberty Crack Trojan Horse?

The “Liberty” Crack is a malicious program masquerading as an illegal, but free, version of Liberty.[3] The program attempts to delete all of the programs stored on a PDA (Personal Data Assistant) and then reboot the device.[2] Aliases for the trojan are Liberty Crack, Liberty_1_crack.prc, Palm.Liberty.A, Palm/Liberty-A, Trojan.Palm.Liberty.

The “Liberty Crack” was introduced on Internet Relay Chat systems. It resembled one of thousands of crack programs that provide free access to the full-featured Liberty console on PDAs.[4]

How do I know If my PDA has been infected?

[1] Info.astrian.net. “The Jargon Dictionary” URL: http://info.astrian.net/jargon/terms/t/Trojan_horse.html

[2] Computertalkwithtab.com “Palm OS “Liberty” Crack” (24 September 2000) URL: http://www.computertalkwithtab.com/virinfo.html

[3] Miles, Stephanie. “Trojan horse rears its head on Palms” (28 August 2000) URL: http://news.cnet.com/news/0-1006-200-2635223.html

[4] Salkever, Alex. “The Next Target for Viruses: Mobile Devices” (5 September 2000) URL: http://www.businessweek.com/bwdaily/dnflash/sep2000/nf2000095_571.htm

The Liberty Crack trojan only affects handheld devices running the Palm operating system. PDA devices are manfactured by Palm, Handspring, IBM, TRG, and Symbol Technologies.[6]

There are 2 ways to tell that you may have the trojan:

1) On a PalmOS device, the trojan will appear in the launcher with the same icon as the "Liberty" application and will bear the name "Crack 1.1".[5]
2) On a PC, the trojan will appear as a file named "liberty_1_crack.prc" with a file size of 2,663 bytes.[5]

How did my PDA get infected?

The Liberty Crack trojan-horse virus can only be transmitted to the Palm device as part of a normal data transfer operation between two devices. Examples of transmission methods are HotSyncing from a host computer or infrared "beaming' operation between two Palm devices.[2] Omnisky wireless internet users can also receive the trojan via email as an attachment.[5]

Syncing is the No. 1 method of infection since it is the main method for users to transfer data to and from the device.[7]

How do I get rid of the Liberty Crack trojan-horse virus?

According to Palm, anyone who executes the malicious application can perform a "hard reset" on the device and re-synchronize with data stored on the PC.[3]

When a "hard reset" is performed all records and entries stored in the PDA are erased. Formats, Preferences and other settings are restored to their factory defaults. Data previously synchronized with your computer during the HotSync operation can be restored. Unless Palm OS 3.3 or a third party backup solution is used, all third party applications will have to be reinstalled.[8]

[6] Palm Computing "First Palm OS Trojan Horse Discovered" (30 August 2000) URL: http://www.advisor.com/Articles.nsf/aid/OLSEE149

[5] McAfee.com :"Virus Profile" (28 August 2000) URL: http://vil.mcafee.com/dispVirus.asp?virus_k=98801

[7] ZDNET.com. "Cell phone, PDA users safe – for now" (29 September 2000) URL: http://www.zdnet.com/zdnn/stories/news/0,4586,2635032,00.html

Is there any way to protect my Palm against viruses?

People who transfer data from PC to Palm and from Palm to Palm should consider anti-virus protection for handheld devices. Anti-virus vendors McAfee and Norton Antivirus offer users software that scans PalmOS files with a ".prc" file extension.[2] Other solutions are the free downloads of F-Secure Anti-Virus for Palm and F-Secure for Windows.[9]

Conclusion

The Liberty "Crack" trojan-horse virus has shown that even PDAs are susceptible to viruses. Also, it may have forced many people to reconsider downloading illegal programs for their Palms and their PC. Antivirus software vendors have expanded their coverage to include PDAs. Customers will have to maintain current backups of their data. Hopefully consumer awareness will increase and other viruses like the "Liberty" Crack trojan-horse won't have a chance to propagate.

References

1. Info.astrian.net. "The Jargon Dictionary" URL: http://info.astrian.net/jargon/terms/t/Trojan_horse.html
2. Computertalkwithtab.com "Palm OS "Liberty" Crack" (24 September 2000) URL: http://www.computertalkwithtab.com/virinfo.html
3. Miles, Stephanie. "Trojan horse rears its head on Palms" (28 August 2000) URL: http://news.cnet.com/news/0-1006-200-2635223.html
4. Salkever, Alex. "The Next Target for Viruses: Mobile Devices" (5 September 2000) URL: http://www.businessweek.com/bwdaily/dnflash/sep2000/nf2000095_571.htm
5. McAfee.com :"Virus Profile" (28 August 2000) URL: http://vil.mcafee.com/dispVirus.asp?virus_k=98801
6. Palm Computing "First Palm OS Trojan Horse Discovered" (30 August 2000) URL: http://www.advisor.com/Articles.nsf/aid/OLSEE149
7. ZDNET.com. "Cell phone, PDA users safe – for now" (29 September 2000) URL: http://www.zdnet.com/zdnn/stories/news/0,4586,2635032,00.html
8. Palm.com "Resetting Your Palm Handheld" URL: http://www.palm.com/support/helpnotes/hardware/resets.html
9. Advisor.com. "Palm: Technology. "Phage" Virus Attacking Palm Devices" (25 September 2000) URL: http://www.advisor.com/Articles.nsf/AID/SMITT21

[8] Palm.com "Resetting Your Palm Handheld" URL: http://www.palm.com/support/helpnotes/hardware/resets.html

[9] Advisor.com. "Palm: Technology. "Phage" Virus Attacking Palm Devices" (25 September 2000) URL: http://www.advisor.com/Articles.nsf/AID/SMI