PC SECURITY LABS

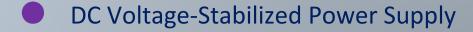
Android 4.0



Malware Detection Test

False Positive COMPARATIVES Power Consumption

Mobile Security





Privacy



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CONTACT US

ROOM 3304-3306, BUILDING 3, NO.3339 LINGGONGTANG ROAD, JIAXING, ZHEJIANG, P. R. CHINA



1. BACKGROUND

Smartphone plays a more and more important role in people's daily life, more and more people use smartphone to seek and receive information from internet. Gartner's numbers show that during the first quarter of 2013, Android smartphones accounted for 74.4 percent of global sales. This represents more than 156 million devices and a jump of nearly 20 percent in market share year-on-year.

Malware can do the followings (all are actual cases):

- 1. Send messages to "premium service" SMS numbers that cost extra money.
- 2. Send your personal information to unknown parties.
- 3. Turn your phone into a part of a botnet so others can execute commands remotely for nefarious purposes, such as spam, DDOS attack, and more.
- 4. Non-authorized persons may monitor your phone calls and text messages.
- 5. Open you to blackmail, if something embarrassing can be found and sent elsewhere.
- 6. Trick you into entering financial information, such as account number, birth date, and more.
- 7. Even stuff on your PC... if you connect your PC to your smartphone.
- 8. And more...

2. TEST PROCESS

An android 4.0 mobility device will be prepared and Maynuo DC Voltage-Stabilized Power Supply will provide electricity to the device instead of battery.

Detailed process is as follows:

- 1. More than 2000 malware samples and bulks of clean android applications will be prepared on the SD card.
- 2. Install security product on the device.
- 3. Update the security product and perform a full scan to check the malware set and clean applications. Malware detection rate and false positive status will be recorded. If full scan function is not provided, then perform manual installation.
- 4. Repeat these steps above.



3. SOFTWARE INFORMATION

Software	Vendor	Version
avast! Mobile Security	AVAST	3.0.6978
Baidu Mobile Guardian	Baidu	V4.1.0
COMODO Mobile Security	COMODO	2.4.1
Dr.Web anti-virus Light	Dr.Web	7.00.10(0)
F-Secure Mobile Security	F-Secure	8.3.13929 FS_ES
Kaspersky Internet Security for Android	Kaspersky Lab	11.1.7.78
Malwarebytes Anti-Malware Mobile	Malwarebytes	v1.02.1.1000
Quick Heal Mobile Security	Quick Heal	1.01.070
Tencent Mobile Security Manager	Tencent	4.6.0 Build 2321
Trend Micro Mobile Security	Trend Micro	3.5.0.1348
TrustGo Mobile Security	TrustGo	1.3.14
Zoner AntiVirus Free	ZONER	1.8.2



4. RESULT

4.1 MALWARE DETECTION RATE AND FALSE POSITIVE STATUS

Software	Malware Set	Undetected	Detection Rate	FPs
Kaspersky Internet Security for Android	2204	2	99.909%	0
Tencent Mobile Security Manager	2204	2	99.909%	0
Trend Micro Mobile Security	2204	11	99.501%	0
TrustGo Mobile Security	2204	13	99.410%	0
Baidu Mobile Guardian	2204	24	98.911%	0
avast! Mobile Security	2204	27	98.775%	0
F-Secure Mobile Security	2204	29	98.684%	1
Quick Heal Mobile Security	2204	83	96.234%	0
COMODO Mobile Security	2204	86	96.098%	0
Dr.Web anti-virus Light	2204	97	95.599%	0
Malwarebytes Anti-Malware Mobile	2204	1018	53.811%	0
Zoner AntiVirus Free	2204	1868	15.245%	0

Software	Detection Rate	FPs	Score	Rank
Kaspersky Internet Security for Android	99.909%	0	99.909	1
Tencent Mobile Security Manager	99.909%	0	99.909	1
Trend Micro Mobile Security	99.501%	0	99.501	3
TrustGo Mobile Security	99.410%	0	99.410	4
Baidu Mobile Guardian	98.911%	0	98.911	5
avast! Mobile Security	98.775%	0	98.775	6
F-Secure Mobile Security	98.684%	1	98.584	7
Quick Heal Mobile Security	96.234%	0	96.234	8
COMODO Mobile Security	96.098%	0	96.098	9
Dr.Web anti-virus Light	95.599%	0	95.599	10
Malwarebytes Anti-Malware Mobile	53.811%	0	53.811	11
Zoner AntiVirus Free	15.245%	0	15.245	12



4.2 MONTHLY AWARD

Vendor	Score	Monthly Award
Kaspersky Lab	99.909	
Tencent	99.909	
Trend Micro	99.501	PCSULTING INSTITUTE
TrustGo	99.410	
Baidu	98.911	2014.01
AVAST	98.775	2014.01
F-Secure	98.584	
Quick Heal	96.234	PCSE.
COMODO	96.098	2014.01
Dr.Web	95.599	PCSE IT CONSULTING INSTITUTE 2014.01
Malwarebytes	53.811	PCSE.
ZONER	15.245	TESTED

Final Score=Malware Detection Rate*100-0.1*False Positive



5. TESTER INTRODUCTION

JIAXING CHENXIANG INFORMATION TECHNOLOGY CO., LTD., is an IT product test and consulting company located in Jiaixing, Zhejiang Province, China. As a professional tester of desktop security products and also mobility security solutions, we are willing to provide references to the endpoint users for choosing security solutions. Not only we test security solutions for different environment and customers, but also we provide test and consulting reports of other IT products, e.g. battery, mobility devices, computer power, etc.

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■ 2014 January



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