
FINFISHER: GOVERNMENTAL IT INTRUSION
AND REMOTE MONITORING SOLUTIONS
WWW.GAMMAGROUP.COM
FINFISHER
IT INTRUSION

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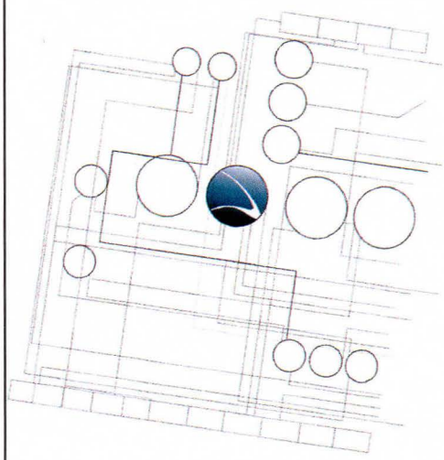
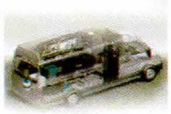


Gamma Group - Fields of Operation

- **Gamma TSE**
  - Technical Surveillance Equipment
  - Surveillance Vans



- **G2Systems**
  - Intelligence Training
  - VIP Protection

- **Gamma International**
  - **FinFisher - IT Intrusion**
  - Communication Monitoring

We only serve Governmental Customers

- **Law Enforcement Agencies:**
  Police (Intelligence, Special Branch), Anti -Corruption, VIP Protection, Presidential Guard, Customs, Naval & Boarder Security
- **Intelligence Agencies:**
  Internal and External Security Departments
- **Military:**
  Intelligence, Signal Intelligence, Army, Navy, Air Force
- **Special Events:**
  International Conferences & Events

Facts, Sales & Support Operation

- **Founded:**
  1996
- **Office Locations:**
  9 offices in 4 continents
- **Partner Sales & Support:**
  Southern America
- **Gamma Group Turnover :**
  EUR 80' (in 2010)
- **Employees :**
  78 Globally

History and Background of FinFisher

- Research starting point was the most government used Intrusion tool worldwide: **Backtrack** (4 Million downloads)
- Winning one of the top **Intrusion Specialists and founder of Backtrack** to build up required capabilities and to design a **comprehensive** portfolio
- Generating a team of **world class intrusion and research specialists and programmers** (well known through public presentations at conventions i.e. Black Hat, DEFCON)

Challenges in LI systems

Due to changes in technology, **traditional passive monitoring** systems **face new challenges** that can only be solved by **combining them with active solutions.**

- **Encryption technologies**:
  - SSL/TLS Encryption (Web, E-Mail, Messenger, ...)
  - Instant Messaging (Skype, SimpLite, Blackberry Messenger ...)
  - Data Encryption (PGP, S/MIME, ...)
  - Hard-Disk Encryption (Truecrypt, SafeGuard, ...)
  - VPN Connections
- **Global mobility** of Devices and Targets
- **Anonymity** through Hotspots, Proxies, Webmail, ...

Governmental IT Intrusion in the News

IT Intrusion is **used worldwide** by many governments **since several years.**

Germany Furious Over Chinese Spy Hackers

BEI
PR

Georgia President's web site under DDoS attack from Russian hackers

By Heather M

By Dancho Dan

Summar

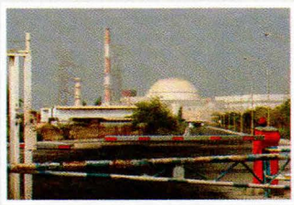
From Russia wi
(political) love?
appears so acco
deeper analysis
command and c
servers used by
attackers. Durin
weekend, Georg
President's web
under a distribu

(3 of 3) « Prev | N

German Chancellor Angela Merk
Chinese Premier Wen Jiabao du
guard of honor at the Great Hall
China, Monday, Aug. 27, 2007....

Stuxnet malware is 'weapon' out to destroy ... Iran's Bushehr nuclear plant?

The Stuxnet malware has infiltrated industrial computer systems worldwide. Now, cyber security sleuths say it's a search-and-destroy weapon meant to hit a single target. One expert suggests it may be after Iran's Bushehr nuclear power plant.



This reactor building of Iran's Bushehr nuclear power plant, pictured here on Aug. 20, is located about 750 miles south of Tehran. Is the power plant the target of the malware Stuxnet?

Vahid Salemi/AP

Enlarge

Governmental IT Intrusion - Legal Situation

New laws are being established all around the world and **Trojan-Horse technology** is already legally used in many countries.

ZDNet / News / Software

Australian police get go-ahead on spyware

By Mi

Leaked Documents Show German Police Attempting to Hack Skype

By Kim Zetter January 29, 2008 | 12:10 pm | Categories: Hacks and Cracks, Surveillance, Wikileaks

Like

Sumn

FBI uses hacking technology for surveillance

Docume
appear
German
horse m
searche
Skype c
traffic.

By Staff, CNet, 22 November, 2001 11:50

Topics

Hacking, trojan horse, Surveillance, FBI, Tools, keystrokes, Viruses

NEWS A new tool reportedly being developed by law enforcement agencies to remotely install surveillance programs on a suspect's computer is little more than three-year-old hacking technology, security experts said on Wednesday.

On Tuesday, MSNBC reported that the FBI was working on a computer "virus" to install key-logging programs and other surveillance software onto a suspect's computer.

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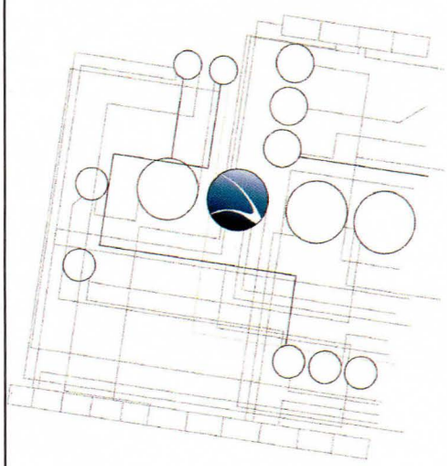
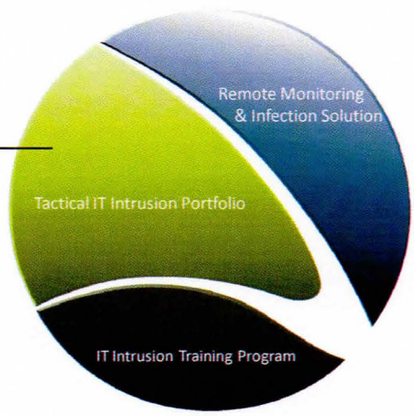


Tactical IT Intrusion Portfolio

FinUSB Suite

FinIntrusion Kit

FinFireWire



FinUSB Suite / Operational Usage

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The FinUSB Suite is designed to **covertly extract data** from Target Systems.

Typical Operations:

Public Systems:

- Quick Forensic Analysis (20-30 seconds)
- Essential tool for Technical Surveillance Units

Target Systems:

- Using Sources that have physical access to automatically extract Intelligence
- Dongle can be used e.g. by housekeeping staff
- Data is fully encrypted and can only be decrypted in HQ

FinUSB Suite / Core Features

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- Extraction of **Usernames and Passwords** for all common software like:
  - E-Mail Clients
  - Messengers
  - Browsers

- **Silent Copying of Files** (Search Disks, Recycle-Bin, Last Opened)

- Extracting **Network Information** (Chat Logs, Browsing History, WEP/WPA(2) Keys, Cookies, ...)

- Compilation of **System Information** (Running/Installed Software, Hard-Disk Information, ...)

FinUSB Suite / Headquarter Software

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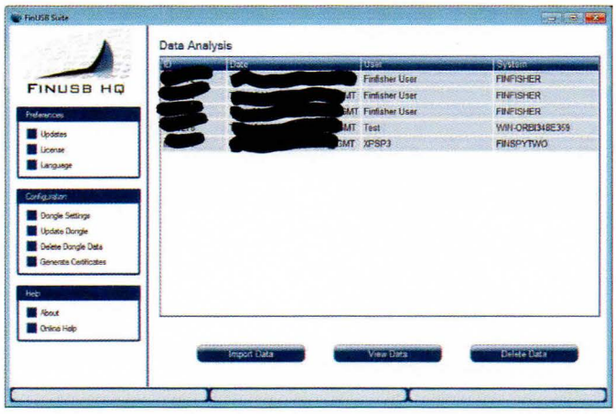
The FinUSB HQ provides **target-specific configurations** and professional data analysis.



FinUSB Suite / Professional Reports

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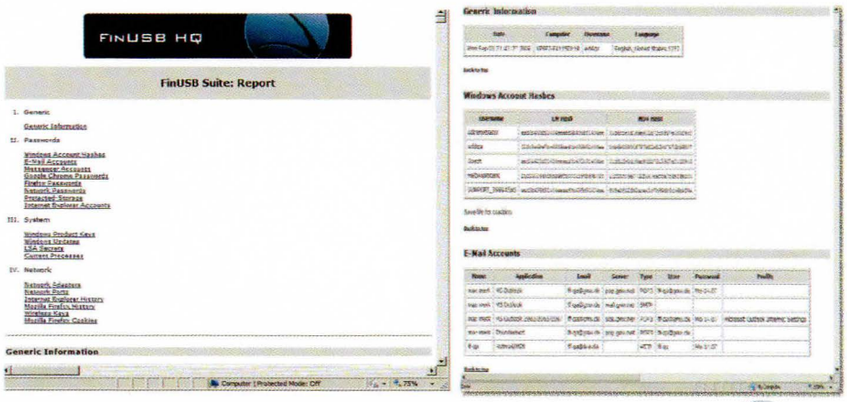
Sample report generated by the *FinUSB HQ* software:



FinUSB Suite / Portable Unit

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- Notebook (Windows 7, FinUSB HQ)

- 10 FinUSB Dongles

- 2 Bootable CD-Roms

Tactical IT Intrusion Portfolio

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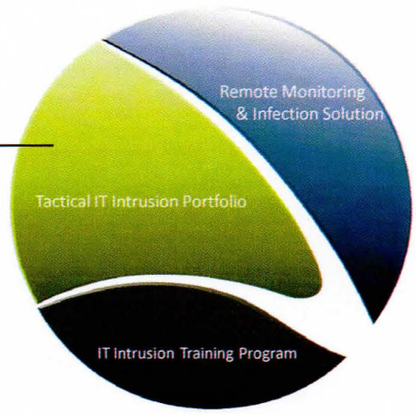
FinUSB Suite

FinIntrusion Kit

FinFireWire



FinIntrusion Kit / Operational Usage

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The **FinIntrusion Kit** is a portable IT Intrusion kit which can be used for various strategic and tactical attacks by red-teams inside or outside the Headquarters.

Typical Operations:

Wireless Networks:

- Break Encryption and record all Traffic
- Record Usernames and Passwords even for SSL-encrypted sites (e.g. Facebook, MySpace, Online Banking)

Access remote Systems:

- Gain access to remote Infrastructures and Webservers
- Get access to E-Mail Accounts

FinIntrusion Kit / Core Features

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- Discover **Wireless LANs (802.11) and Bluetooth® devices**
- Recover WEP (64 and 128 bit) Passphrase **within 2-5 minutes**
- **Break WPA1 and WPA2** Passphrase using Dictionary Attacks
- Emulate **Rogue Wireless Access-Point** (802.11)
- Actively monitor Local Area Network (Wired and Wireless) and **extract Usernames and Passwords even for SSL/TLS-encrypted Sessions like GMail, Hotmail, Facebook, etc.**
- Remotely **break into E-Mail Accounts** using Network-, System- and Password-based Intrusion Techniques

FinIntrusion Kit / Operation Center

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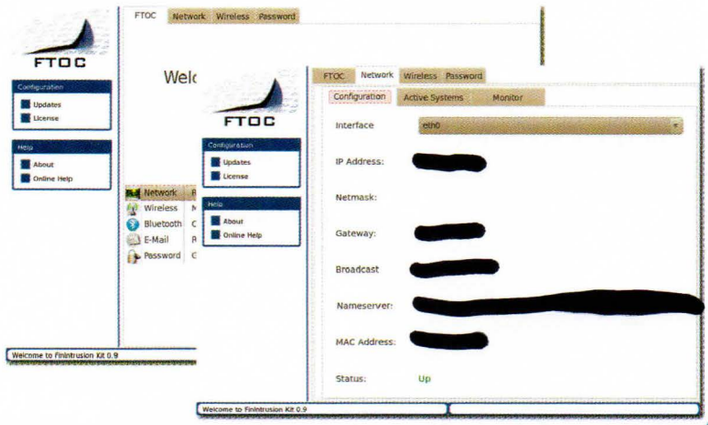
The Operation Center provides easy-to-use **point-and-click attacks.**



FinIntrusion Kit / Covert Tactical Unit

21

- Notebook (FinTrack, FTOC)

- Autorun and bootable USB Device

- FinTrack bootable CD-Rom

- Wireless Intrusion Hardware

Tactical IT Intrusion Portfolio

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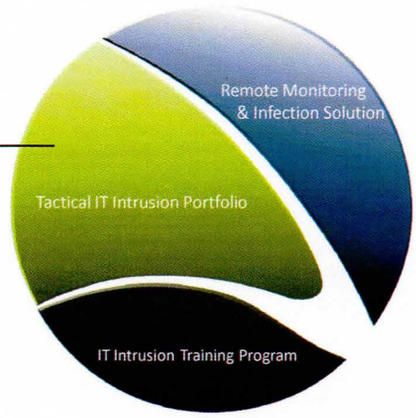
FinUSB Suite

FinIntrusion Kit

FinFireWire



FinFireWire / Operational Usage

23

The **FinFireWire** product enables quick and covert access to locked Target Systems without loosing critical evidence due to requiring to reboot the system.

Typical Operations:

Unlock Running Systems:

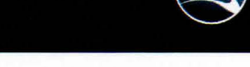
- Get **Live access** to running Systems, no more need to reboot and loose essential Evidence
- Modification of system is only temporary and reverted after Operation

Dump RAM Information:

- Extract data from physical RAM for Forensic analysis
- Recover crypto passwords and more

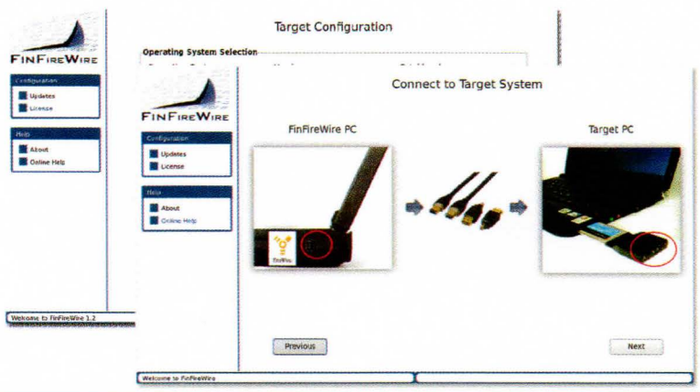
FinFireWire / Core Features

- The product functions on any major Operating System such as **Microsoft Windows (XP -> 7), Linux and Mac OSX**
- The product enables the agent to access the Target System **without providing any password**
- No reboot is required, **quick and covert access** is possible **without loosing important evidence**
- All configured RAM can be recorded into a file and later analyzed in common Forensic tools like Encase to **discover e.g. Hard-Disk Encryption Passwords**
- Works with **FireWire/1394, PCMCIA and Express Card**



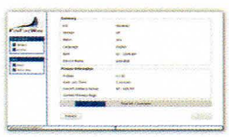
FinFireWire / User Interface

Once connected to the Target System, the software provides a **easy-to-use point-and-click Interface.**



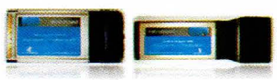
FinFireWire / Portable Unit

- FinFireWire Software



- FireWire Cables for all Ports

- PCMCIA / Express Card Adapters



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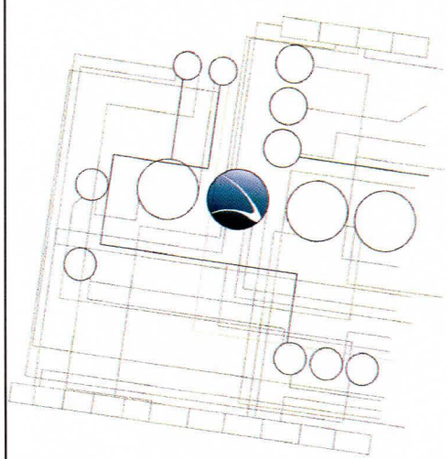

Remote Monitoring and Infection Solutions

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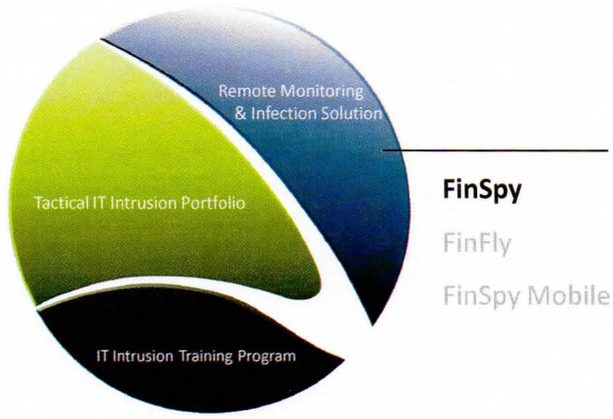

FinSpy / Operational Usage

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FinSpy is an advanced Intrusion system which once implemented into a Target System guarantees full access to the system with advanced features.

Typical Operations:

Monitor Encrypted Communication:

- Full access to all communication including Skype
- Record even SSL-encrypted Communication

Remotely Access Target Systems:

- Full File-System Access
- Surveillance through Webcam and Microphone
- Live Monitoring even if Targets are in foreign Countries

FinSpy / Core Features

30

- The product functions on any major Operating System such as **Microsoft Windows (2000 -> 7), Mac OSX and Linux**
- All communication and all temporary files are **fully encrypted**
- Target software is regularly tested to **bypass the world's top 40 Anti-Virus** applications and **hide deep inside the Target System**
- True location of the Headquarter is **completely hidden** through **anonymizing Proxies** around the world
- The system can be **fully integrated** with an existing Law Enforcement Monitoring Functionality (LEMF)
- Court-proof Evidence according to **European Standards**

FinSpy / Target Features

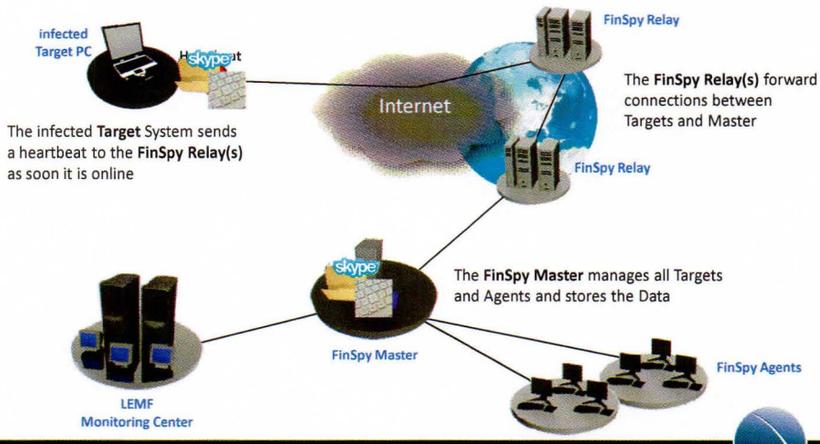
31

- Full **Skype Monitoring** (Calls, Chats, File Transfers, Video, Contact List)
- Recording of **all VoIP communication**
- **Live Surveillance** through Webcam and Microphone
- **Country Tracing** of Target
- **Full File-Access:** Live File-Browsing, capturing of deleted/printed/opened Documents
- **Process-based Keylogger** for faster analysis
- Forensic Tools for **Live Remote Forensic**
- **Enhanced Filtering** of data and recorded Information

FinSpy / Network Layout

32

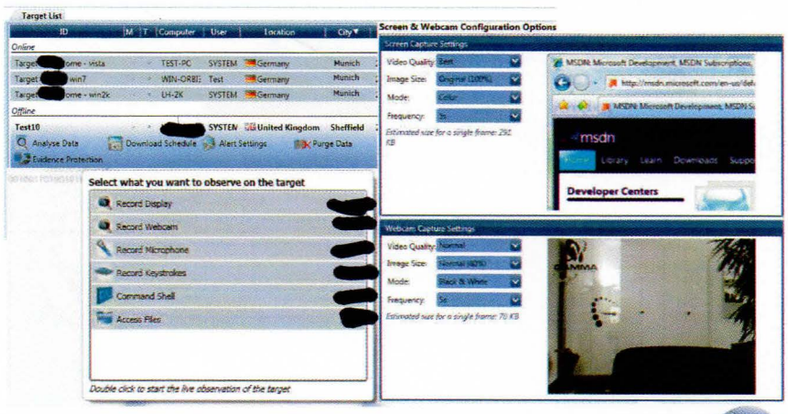
With the **FinSpy Master LEMF Interface** the tactical solution can be fully integrated into the Law Enforcement Monitoring Functionality (LEMF)



FinSpy / User Interface

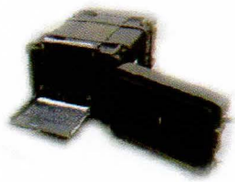
33

The whole system is controlled through the **easy-to-use Graphical User Interface**.



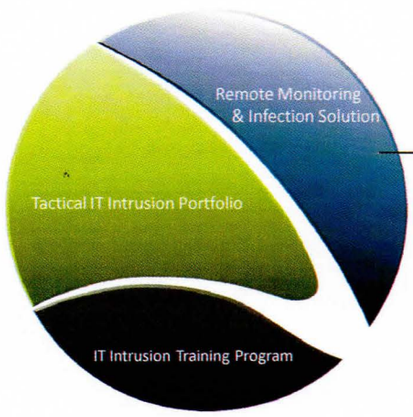
FinSpy / Strategic System

- FinSpy Master and Relay



- FinSpy Agent(s)

Remote Monitoring and Infection Solutions



FinSpy

FinFly

- **USB**
- Web
- LAN
- ISP

FinSpy Mobile

FinFly USB / Operational Usage

FinFly USB provides an easy-to-use and reliable way of installing Remote Monitoring Solutions on Target Systems when **physical access** is available.

Typical Operations:

Deploy FinSpy on running System:

- Plug-in USB in running Target System to install FinSpy

Deploy FinSpy on turned off System:

- Boot USB to automatically deploy FinSpy

FinFly USB / Core Features

- Common USB Device with **hidden functionality**
- **Automatic execution** on Windows 2000/XP based Systems
- **One-Click execution** on Windows Vista/7 based Systems
- Automatic Installation through **bootable System**
- Can even **infect switched off Target Systems** when the Hard-Disk is **fully encrypted** with TrueCrypt

FinFly USB / Hardware and Software

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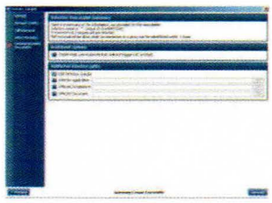
- 5 FinFly USB Dongles

- Full Integration into FinSpy



Remote Monitoring and Infection Solutions

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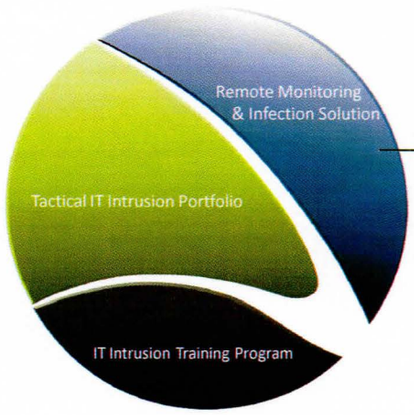


FinSpy

FinFly

- USB
- **Web**
- LAN
- ISP

FinSpy Mobile

FinFly Web / Operational Usage

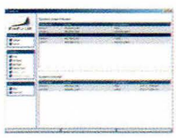
40

FinFly Web is designed to covertly inject a configurable software into remote Target Systems through integration in Websites.

Typical Operations:

Deploy FinSpy through custom Homepages:

- Create Website of Target Interest Field
- Infect Target with FinSpy when it vists the Website



Create FinFly LAN/FinFly ISP Module

- Create Infection Module for Integration into FinFly LAN and FinFly ISP

FinFly Web / Core Features

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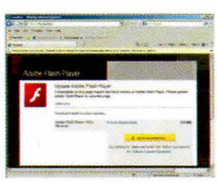
- **All common Browsers** are supported
- **Various Modules** are available for Infection
- Supports generation of **Stand-Alone Websites** to infect Targets where only E-Mail Address or Username inside a Discussion Board is known
- Creates FinFly LAN/FinFly ISP Packages **to inject the Modules even into popular sites** like GMail, YouTube, etc.



FinFly Web / LAN / ISP Integration

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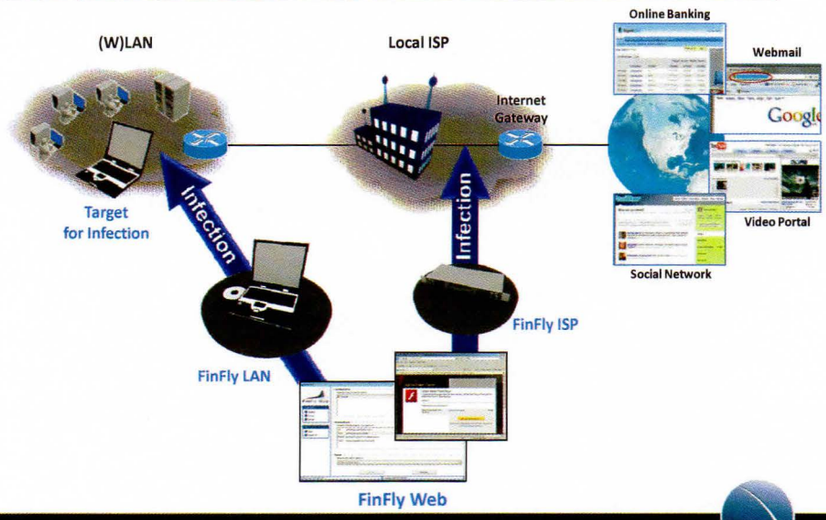

FinFly Web / Hardware and Software

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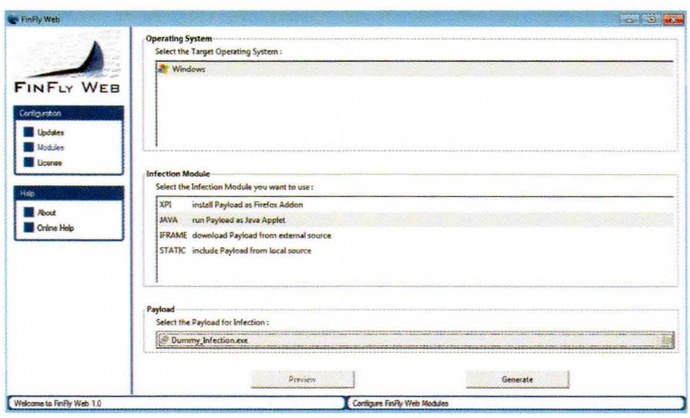
- FinFly Web User Interface



Remote Monitoring and Infection Solutions

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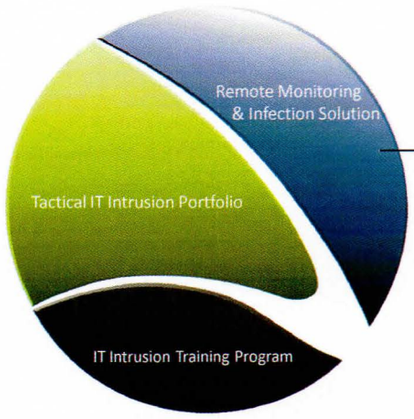


FinSpy

FinFly

- USB
- Web
- **LAN**
- ISP

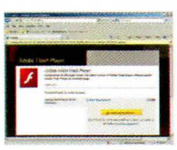
FinSpy Mobile

FinFly LAN / Operational Usage

45

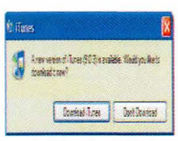
FinFly LAN is designed to covertly inject a configurable software into remote Target Systems in Local Area Networks.

Typical Operations:



Deploy FinSpy through Hotspots:

- Install FinSpy on Target System through Hotspot Wireless Network
- Deploy by infecting common Websites (e.g. YouTube)



Deploy FinSpy through LAN:

- Install FinSpy on Target System in Local Area Network
- Deploy by injecting fake Software Updates

FinFly LAN / Core Features

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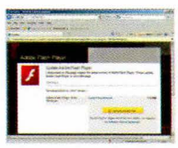
- **Discovers all computer systems** connected to the Local Area Network via **IP-Address, MAC-Address, Host-Name and Operating System**
- Works in **Wired and Wireless** (802.11) networks
- Can be combined with **FinIntrusion Kit** for covert network access
- Hides Remote Monitoring Solution in **Downloads of Targets**
- Injects Remote Monitoring Solution as **Software Updates**
- **Remotely installs Remote Monitoring Solution** through Websites visited by the Target



FinFly LAN / Workflow

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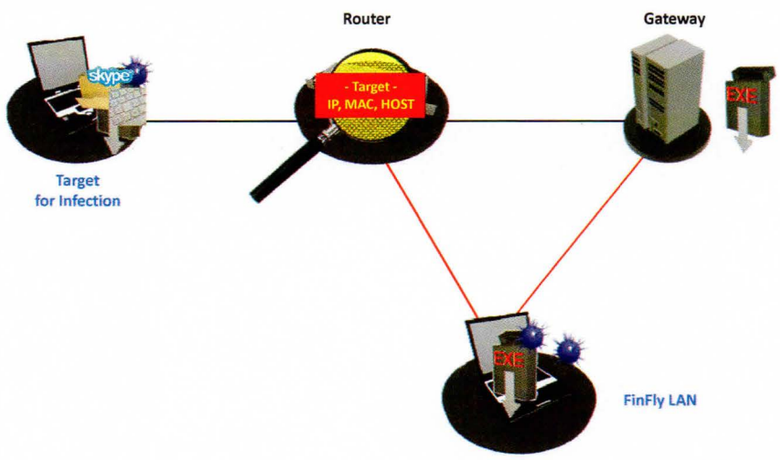

FinFly LAN / Hardware and Software

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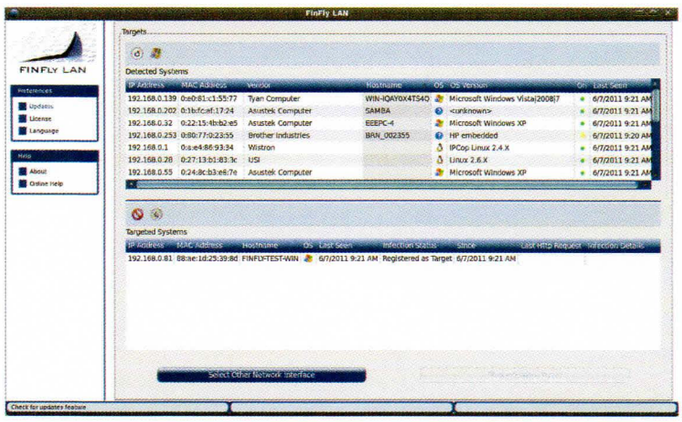
- FinFly LAN User Interface



Remote Monitoring and Infection Solutions

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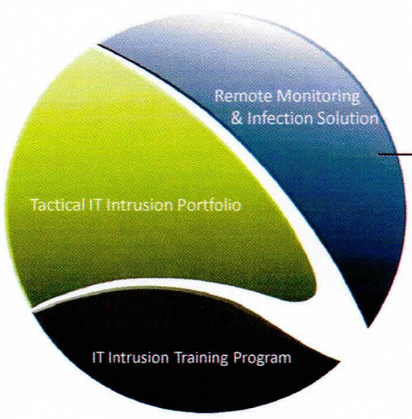

FinSpy

FinFly

- USB
- Web
- LAN
- **ISP**

FinSpy Mobile

FinFly ISP/ Operational Usage

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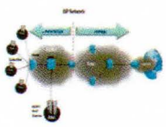
FinFly ISP is designed to covertly inject a configurable software into remote Target Systems through ISP networks.

Typical Operations:



Deploy in Backbone of ISP:

- Install FinSpy on Target Systems by selecting their Username/RADIUS name for Infection

Install in Core of Local Area Networks:

- Install in small ISP/LAN Environments to install FinSpy on local clients (e.g. in Hotels or Corporate Networks)

FinFly ISP / Core Features

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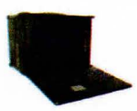
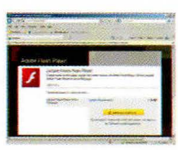
- Identify Targets by:
  - Username, Password (e.g. xDSL)
  - MAC-Addresses (Cable)
  - Dial-in phone number (ISDN, POTS)
  - IMSI, T-IMSI, MSISDN (Internet Access in Mobile Networks)



- Hides Remote Monitoring Solution in **Downloads of Targets**
- Injects Remote Monitoring Solution as **Software Updates**
- **Remotely installs Remote Monitoring Solution** through Websites visited by the Target



FinFly ISP / Deployment Example

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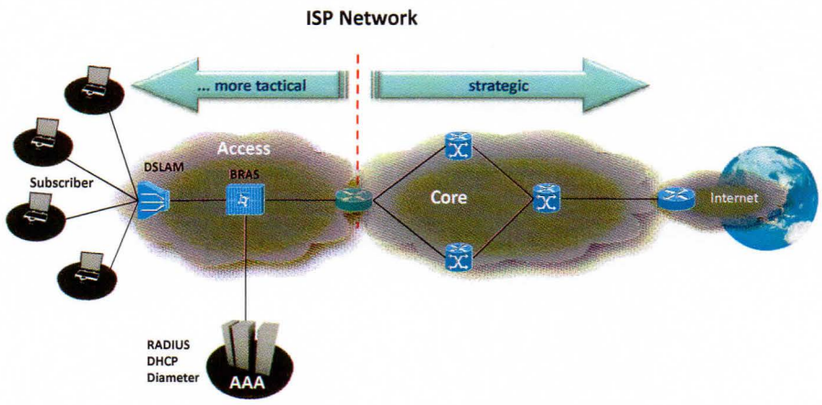

FinFly ISP / Workflow

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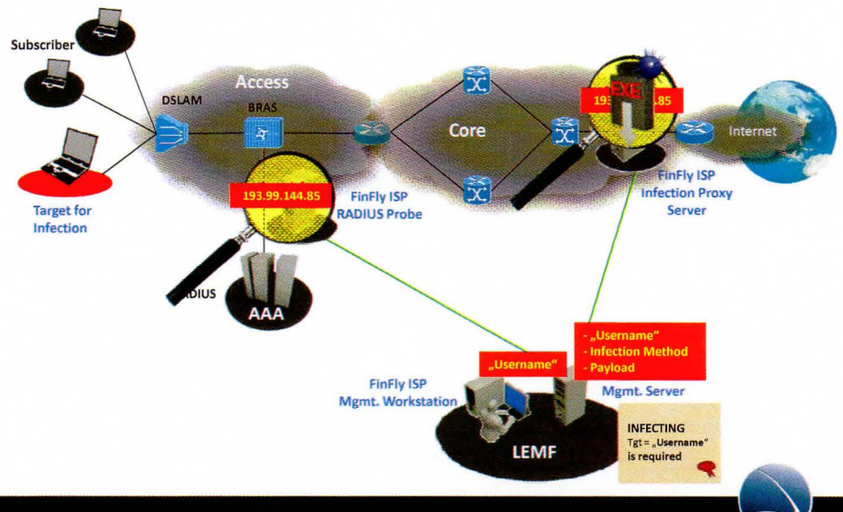
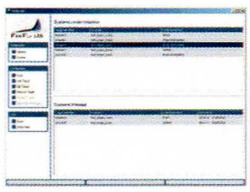


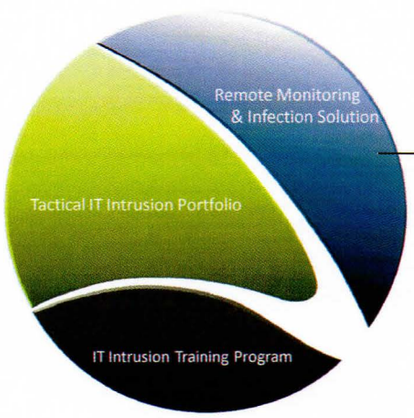
FinFly ISP / Hardware and Software

- FinFly ISP User Interface (GUI)



- Hardware – dependent on requires performance

Remote Monitoring and Infection Solutions



FinSpy

FinFly

FinSpy Mobile

FinSpy Mobile / Operational Usage

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FinSpy Mobile is an advanced Intrusion system which once implemented into a Target Phone guarantees full access to the communication and built-in features.

Typical Operations:

Monitor all Communication:

- Full access to all basic Communication like SMS/MMS, Calls, etc
- Record even encrypted Communication like BlackBerry Messenger

Live Surveillance:

- GPS Tracking of Target Phones
- Spycalls to listen Live to Phone

FinSpy Mobile / Core Features

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- The product functions on any major Operating System such as **BlackBerry, iOS (iPhone), Android and Windows Mobile / Windows Phone**

- All communication and all temporary files are **fully encrypted**

- **BlackBerry Messenger** surveillance
- Recording of **incoming and outgoing** E-Mails

- **Location Tracking** (Cell IDs and GPS Data)
- **Live Surveillance** through Silent Calls
- Basic **Communication Interception** like Calls, SMS/MMS, Call Logs

Evidence

FinSpy Mobile / Setup

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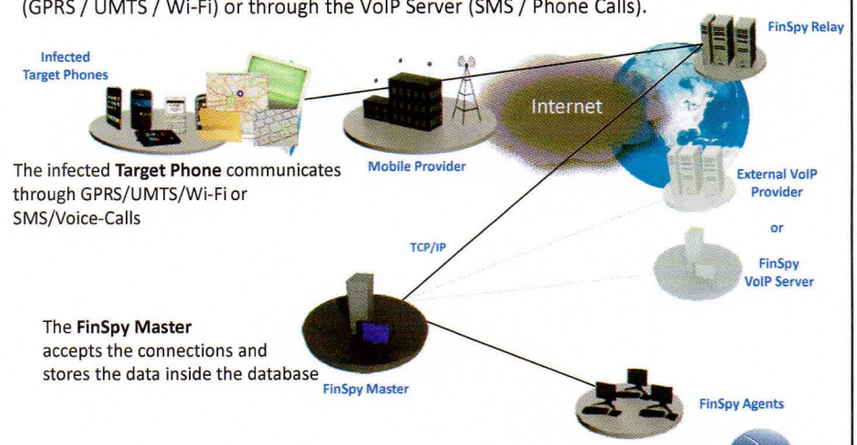
The **FinSpy Mobile** server is connected by infected Target Phones over the Internet (GPRS / UMTS / Wi-Fi) or through the VoIP Server (SMS / Phone Calls).



The infected **Target Phone** communicates through GPRS/UMTS/Wi-Fi or SMS/Voice-Calls

The **FinSpy Master** accepts the connections and stores the data inside the database

FinSpy Mobile / User Interface

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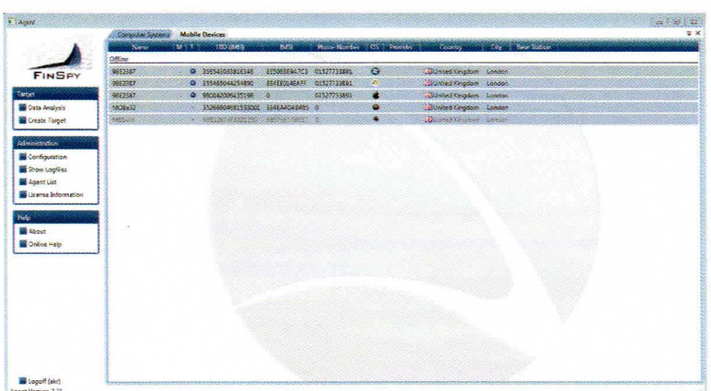
The whole system is controlled through the **easy-to-use Graphical User Interface**.



FinSpy Mobile / Infection Techniques

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Various infection techniques exists like:

- Remote Infection via **Bookmark SMS** to Target Phone

- Provider-Supported Infection via **WAP Push**

- Tactical Infection via **Cable or Bluetooth**

- Infection when **synchronizing with infected PC** (Q4 2011)

FinSpy Mobile / Strategic System

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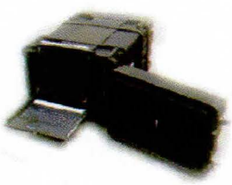
- FinSpy Master and Relay



- FinSpy Agent(s)

- FinSpy VoIP Server PRI Cards for up to 30 lines

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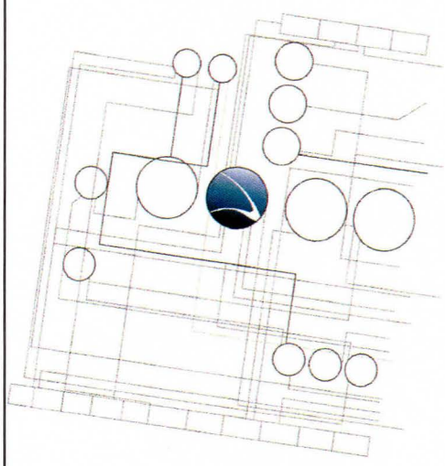

1. Introduction
2. Tactical IT Intrusion Portfolio
3. Remote Monitoring & Infection Solutions
4. **IT Intrusion Training Programm**
5. Summary

IT Intrusion Training Program

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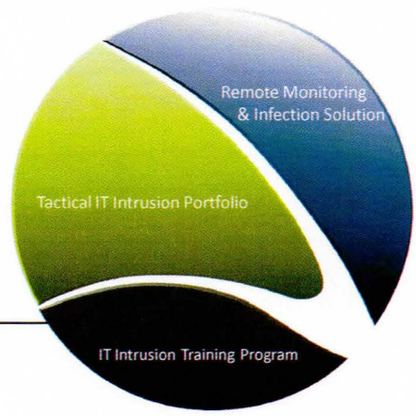

FinTraining

FinTraining / Operational Usage

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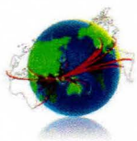
With Gamma's Team of **world-leading IT Intrusion experts**, a wide-range of **practical IT Intrusion trainings** is available.

Typical Operations:



Gain Access to Webserver:

- Remotely get access to Target Servers
- Actively Monitor foreign Targets

Perform Security Assessment:

- Evaluate Security of critical Infrastructures
- Increase Security through regular Penetration Tests

FinTraining / Core Facts

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Training Facts:

- Trainings conducted in Europe or In-Country
- Limited to 2-4 participants
- Fully practical trainings
- Techniques can immediately be used for real-life operations

Contents:

- Basic IT Intrusion Training courses for all Topics
- Most Trainings are fully customized to fulfill customer needs and requirements

FinTraining / Examples

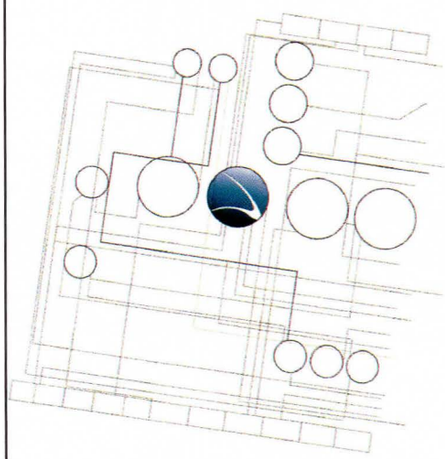
Example Courses:

- Basic and Advanced IT Intrusion
- Basic and Advanced Software Exploitation
- Basic and Advanced Web Application Intrusion
- Wireless IT Intrusion (WLAN, Bluetooth, RF)

Example Topics:

- Profiling of Target Websites, Networks and Persons
- Tracing of anonymous E-Mails
- Remote access to Webmail Accounts
- Security Assessment of Web-Servers & Web-Services
- Monitoring Hot-Spots, Internet Café's and Hotel Networks
- Intercept and Record Calls (VoIP and DECT)

Table of Content



FinFisher – The Complete IT Intrusion Portfolio

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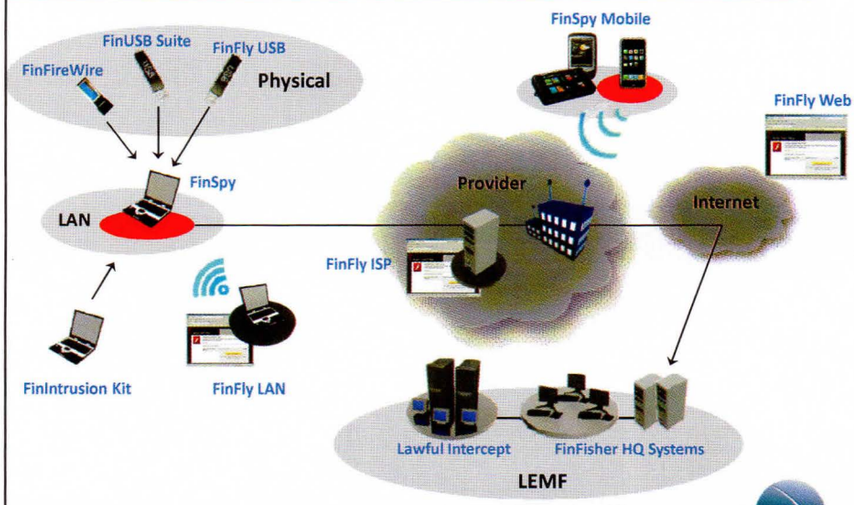

Professional Support

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Online Support Website includes:

- User Manuals
- Product Roadmaps
- Product Change-Logs
- Frequently Asked Questions
- Bug Reporting System

Software updates provided via:

- Download from Web
- Via Online Update System

Why Gamma as a Partner?

Commercial:

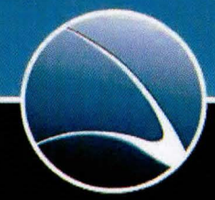
- Long-term, **stable & strong partner**
- Entirely **self-financed, independent** and **privately-owned** company
- All solutions are **made in accordance to end-users** requirements

Technical:

- Many **years of experience** on the field of Governmental IT Intrusion
- **Most advanced** solutions and portfolio in the market
- Existing **global support** infrastructure

Questions?

Thank you for your attention!



FINFISHER
IT INTRUSION

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