



# Police RansomWare

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# Background info

- ▶ Keep the victim's computer hostage against ransom
- ▶ First attacks were in Russia (2005-2006)
- ▶ Check for victim's geo-location
- ▶ Fake country police forces
- ▶ Social engineering
- ▶ Malware creators well organized
- ▶ Difficult to clean

# Police Trojan – What is it?

- ▶ Several groups creating their own Trojan
- ▶ Very persuasive at extracting money from victims
- ▶ New versions popping up
- ▶ Use of affiliate programs
- ▶ Drive-by-download, porn websites

# Different group, same beast

- ▶ At least found 2 suspects affiliate programs
- ▶ Different groups target
- ▶ Showing local police



Control Panel

Login:

Passwd:

[STATISTICS] [PINS] [DOWNLOAD] [FAQ] [EXIT]

**F.A.Q**

Общее описание и управление админ панелью.

**[STATISTICS]**

Online Bots	Количество ботов Онлайн
Hour Bots	Количество ботов за час
Day Bots	Количество ботов за день
Total Bots	Общее количество ботов
Total Pins	Общее количество пинов
OS Stat:	Статистика по ОС ботов
Country Stats	Статистика по странам

**[PINS]**

Здесь Вы можете просматривать полученные пины от ботов, по каждому пину можно посмотреть статистику по Операционной системе бота, его GEO IP расположению и времени отправления. В поле Description можно отмечать валидные и невалидные пины после выставления примечания нажимаем на Update Description.

**[DOWNLOAD]**

Здесь находится ваш файл exe, в RAR архиве.

# 1<sup>st</sup> Group

← → ↻ 🔑 Web 78.46.32.102/pic/ ☆ Search with Google

## Index of /pic

Name	Last modified	Size	Description
<a href="#">Parent Directory</a>	-	-	-
<a href="#">AT.bmp</a>	19-Mar-2012 21:31	1.9M	
<a href="#">pic1.png</a>	19-Mar-2012 21:31	1.0M	

← → ↻ 🔑 Web robot01.be/pin/ ☆ Search with Google

URL = http://78.46.32.102/pic/

Name	Value
Status	200
Status Text	OK
Server	nginx/0.7.67

## Index of /pin

Name	Last modified	Size	Description
<a href="#">Parent Directory</a>	-	-	-
<a href="#">GeoIP.dat</a>	19-Mar-2012 23:00	1.2M	
<a href="#">functions.php</a>	19-Mar-2012 23:00	5.4K	
<a href="#">gate.php</a>	19-Mar-2012 23:00	3.9K	
<a href="#">geoip.inc</a>	19-Mar-2012 23:00	30K	
<a href="#">mysql.php</a>	19-Mar-2012 23:01	444	

Apache/2.2.16 (Debian) Server at robot01.be Port 80

URL = http://robot01.be/pin/

Name	Value
Status	200
Status Text	OK
Server	nginx/0.7.67
Date	Thu, 22 Mar 2012 16:52:31 GMT
Content-Type	text/html; charset=UTF-8
Connection	keep-alive
Vary	Accept-Encoding
Content-Encoding	gzip
Content-Length	521



# 2<sup>nd</sup> group

```
<div id="form">
  <div class="formbody">
    <div class="downheader">
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```





Canadian Security Intelligence Service  
Service canadien du renseignement de sécurité

## Canadian Security Intelligence Service

www.csis.gc.ca



# Other examples



**BUNDESPOLIZEI**  
NATIONAL CYBER CRIMES UNIT  
**ACHTUNG!!!**



## Achtung!!!

Das Betriebssystem wurde im Zusammenhang mit Verstoßen gegen die Gesetze der Bundesrepublik Deutschland gesperrt!  
Es wurde folgender Verstoß festgestellt: Ihre IP Adresse lautet mit dieser IP wurden Seiten mit pornografischen Inhalten, Kinderpornografie, Sodomie und Gewalt  
Ihrem Computer wurden ebenfalls Videodateien mit pornografischen Inhalten, Elementen von Terror und Kindesmissbrauch feststellt!  
**Es wurden auch Email in Form von Spam, mit terroristischen HI**

Um die Sperre des Computers aufzuheben, sind Sie dazu verfl...



Liberté • Égalité  
RÉPUBLIQUE

Ce blocage de l'ordinateur sert à la prevention de vos actes i  
On a relevé l'infraction a la loi: de votre IP adress  
d'enfant, la sodomie et des actes de violence envers les enfant  
a retrouve l'envoi cu

**Pour lever le blocage de l'ordinateur vous devez p  
recouvrement de 100 euros.**

Il y a deux possibilites d'effectuer le paiement:

1) Abolition de dettes a l'aides du systeme de paiement  
Ukash:

Pour le faire vous devez remplir le champs du paiement avec le code du  
puis appuyer sur OK (en cas de deux codes disponibles, remplissez-les  
successivement l'un apres quoi appuyes sur OK)

Si le systeme informe d'une erreur, vous devez envoyer le code a l'adre  
electronique [einzahlung@inter-bundeskriminalamts.eu](mailto:einzahlung@inter-bundeskriminalamts.eu)

2) Paiement a l'aide de Paysafecard:

Pour le faire vous devez remplir le champs du paiement avec le code donne,  
puis appuyer sur OK (en cas de deux codes disponibles, remplissez-les  
successivement l'un apres quoi appuyes sur OK)

En cas d'apparition d'une erreur, vous devez envoyer le code a l'adresse  
electronique [einzahlung@inter-bundeskriminalamts.eu](mailto:einzahlung@inter-bundeskriminalamts.eu)



**La policía ESPAÑOLA**



## Atención!!!

Ha sido detectada actividad ilegal Su sistema operativo ha sido bloqueado debido a una infracción de la legislación alemana!  
Han sido detectadas las siguientes infracciones: Su dirección IP hi sido registrada en las webs ilegales con contenido pornografico orientadas a la difusion de la pornografía infantil, zoofilia imagenes de  
violencia contra menores! En su ordenador han sido detectados los archivos de video de contenido pornografico con elementos de violencia y pornografía infantil! Además, desde su ordenador se  
realiza un envío ilegal (SPAM) de orientación pro terrorista. El presente bloqueo ha sido realizado para prevenir la posibilidad de difusión de dichos materiales desde su ordenador en internet.  
Para desbloquear su ordenador usted ha de pagar una multa de 100 euros! La multa ha de ser abonada antes de 24 horas desde el momento del bloqueo de su ordenador!  
Seran eliminados!



**Guardia di Finanza**  
*Insieme per la legalità*



## Attenzione!!!

È stata rivelata un'attività illegale. Il sistema operativo è stata bloccata per una violenza delle leggi della Repubblica Italiana!  
È stata fissata una seguente violazione: Dal tuo indirizzo IP era eseguito un accesso alle web-pagine contenenti la pornografia, la pornografia minorile, zoofilia, nonché la violenza dei bambini.  
Nel tuo computer sono stati trovati video-file contenenti la pornografia, elementi di violenza e la pornografia minorile.  
**Dalla posta elettronica era effettuato anche la distribuzione dello spam con un senso recondito terroristico. Il bloccaggio di computer serve per troncane l'attività illegale dalla parte tua.**



**Per togliere il bloccaggio devi pagare una multa di 100 euro.  
Hai due seguenti varianti di pagamento:**

1) Effettuare il pagamento tramite l'Ukash.

Per questo inserisci il numero ricevuto nella colonna di pagamento, dopodichè  
Premi OK (se hai più numeri, allora inseriscili uno dopo l'altro, dopodichè premi OK)

Se il sistema segnalerà un errore, allora dovrai mandare il numero per la posta elettronica  
[einzahlung@inter-bundeskriminalamts.eu](mailto:einzahlung@inter-bundeskriminalamts.eu)

2) Effettuare il pagamento tramite il Paysafecard:

Per questo inserisci il numero ricevuto nella colonna di pagamento, dopodichè  
Premi OK (se hai più numeri, allora inseriscili uno dopo l'altro, dopodichè premi OK)

Se il sistema segnalerà un errore, allora dovrai mandare il numero per la posta elettronica  
[einzahlung@inter-bundeskriminalamts.eu](mailto:einzahlung@inter-bundeskriminalamts.eu)

## Ukash Dove passo trovare Ukash?

Puoi richiedere e ottenere Ukash presso migliaia di punti vendita, edicole,  
Stazioni di servizio, bar e tabacchi e negozi di telefonia mobile dotati di  
Terminale **Epay**, **Epipoli**.

Recati presso il punto vendita dotato di terminale **Epay**, **Epipoli** a te più  
Vicino. Richiedi un voucher in contanti al negoziante. Il negoziante dovrà  
Stampare e consegnarti un voucher Ukash con codice PIN da 19 cifre.



## Donde conseguir Ukash



## where can I buy Ukash?

any places, for example: shops, stalls, stand-alone terminals,  
(electronic cash). Below you could find the list of point of sale

Ukash in thousands  
I-Shops which have



Payzone – Ukash available from  
Payzone terminals around the UK.

wherever you see



Inpay – You can get a Ukash  
voucher in values from £10 - £500  
and pay using your internet bank.



# FAKEAV?

- ▶ Security Tool notifications, if country can't be determined
- ▶ Similar to standard FAKEAV attacks

The image shows a simulated Windows security notification. At the top left is a red circle with a white 'X'. The top right corner says 'windows security check'. The main heading is 'ATTENTION!' in red. Below it, a white box contains the text: 'FOR SECURITY REASONS, YOUR WINDOWS SYSTEM HAS BEEN BLOCKED!'. The body text explains that the system is blocked due to visiting infected or pornographic sites and offers a 'paid update' for 100 EUR to restore the system. To the right, under the heading 'SELECT THE PREFERABLE WAY OF PAYMENT', two options are listed: 'Ukash' and 'paysafecard', both marked as 'POSSIBLE' with a green checkmark. Below the text, a three-step process is illustrated: 1. A hand holding a green banknote. 2. A white receipt with a red 'U' logo and 'XXXXXX' text. 3. A laptop screen displaying a shopping cart icon, a red 'U' logo, and 'XXXXXXX PAY'.

**windows security check**

**ATTENTION!**

**FOR SECURITY REASONS, YOUR WINDOWS SYSTEM HAS BEEN BLOCKED!**

The reason can be visiting the infected or pornographic sites. The computer has approached to critical condition because of which the system can break and all data can be lost. For having possibility to restore system, you should install the additional security updates.

This paid update is intended for very infected systems. This update completely protects your system from viruses and malware, stabilizes your computer system and avoids data loss.

**SELECT THE PREFERABLE WAY OF PAYMENT**

**Ukash** POSSIBLE ✓

**paysafecard** POSSIBLE ✓  
pay.cash. pay.safe.

Your computer system will be restored (cured) soon, to do this you need enter a code for transfer 100 EUR Paysafecard or Ukash systems. You can buy it (code) at any gas station or newsstand. Such codes can be also purchased where recharge cards are on sale.

1 2 3

Immediately after entering a code and checking its correctness, your computer system will be upgraded and protected - all trojans and viruses will be removed.



# How do they retrieve the money

- ▶ New payment method
- ▶ Used vouchers instead of credit card payments
- ▶ 2 kind of vouchers accepted, PaySafeCard/Ukash
- ▶ Online, gas station, kiosks, pharmacy through Europe
- ▶ Available in the US and Canada
- ▶ No record if voucher change hands
- ▶ It can be sold and re-sold, until someone spend it

# Underground Voucher Exchange

- ▶ Use of vouchers
- ▶ Cybercriminals
- its value
- ▶ These vouchers
- an end to
- ▶ Exchange

The screenshot shows the website www.ukashexchange.tk. The header features the text "UKASH EXCHANGE" and "FAST AND SAFE". A navigation bar includes links for "EXCHANGE RATES", "LIBERTY RESERVE", "PAYPAL", "BANK WIRE", and "CONTACT US". A "MENU" box on the left lists links to Home, PayPal, Liberty Reserve, Bank Wire, and Contact Us. The main content area displays "WELCOME TO UKASH EXCHANGE" and "EXCHANGE RATES". Below this, it specifies "Ukash Voucher Currency - GBP" and presents a table of exchange rates for various countries.

Country	Buy Currency	Sell Currency	Rate	Currency
Australia	AUD	GBP	1.456	Australian Dollar
Canada	CAD	GBP	1.517	Canadian Dollar
Czech Republic	CZK	GBP	30.05	Czech Koruna
Denmark	DKK	GBP	9.108	Danish Krone
European Union	EUR	GBP	1.221	Euro
Hungary	HUF	GBP	336.185	Hungarian Forint
Latvia	LVL	GBP	0.84	Latvian Lats
Mexico	MXN	GBP	19.927	Mexican Peso
New Zealand	NZD	GBP	1.869	New Zealand Dollar
Norway	NOK	GBP	8.919	Norwegian Krone
Poland	PLN	GBP	4.943	Polish Zloty
Singapore	SGD	GBP	1.891	Singapore Dollar
South Africa	ZAR	GBP	12.682	South African Rand
Sweden	SEK	GBP	10.107	Swedish Krona
Switzerland	CHF	GBP	1.468	Swiss Franc
United States	USD	GBP	1.529	United States Dollar

# Summary

- ▶ Threat landscape change
- ▶ Several cybercriminal groups
- ▶ Business model improved
- ▶ Vouchers are now used