

websense®

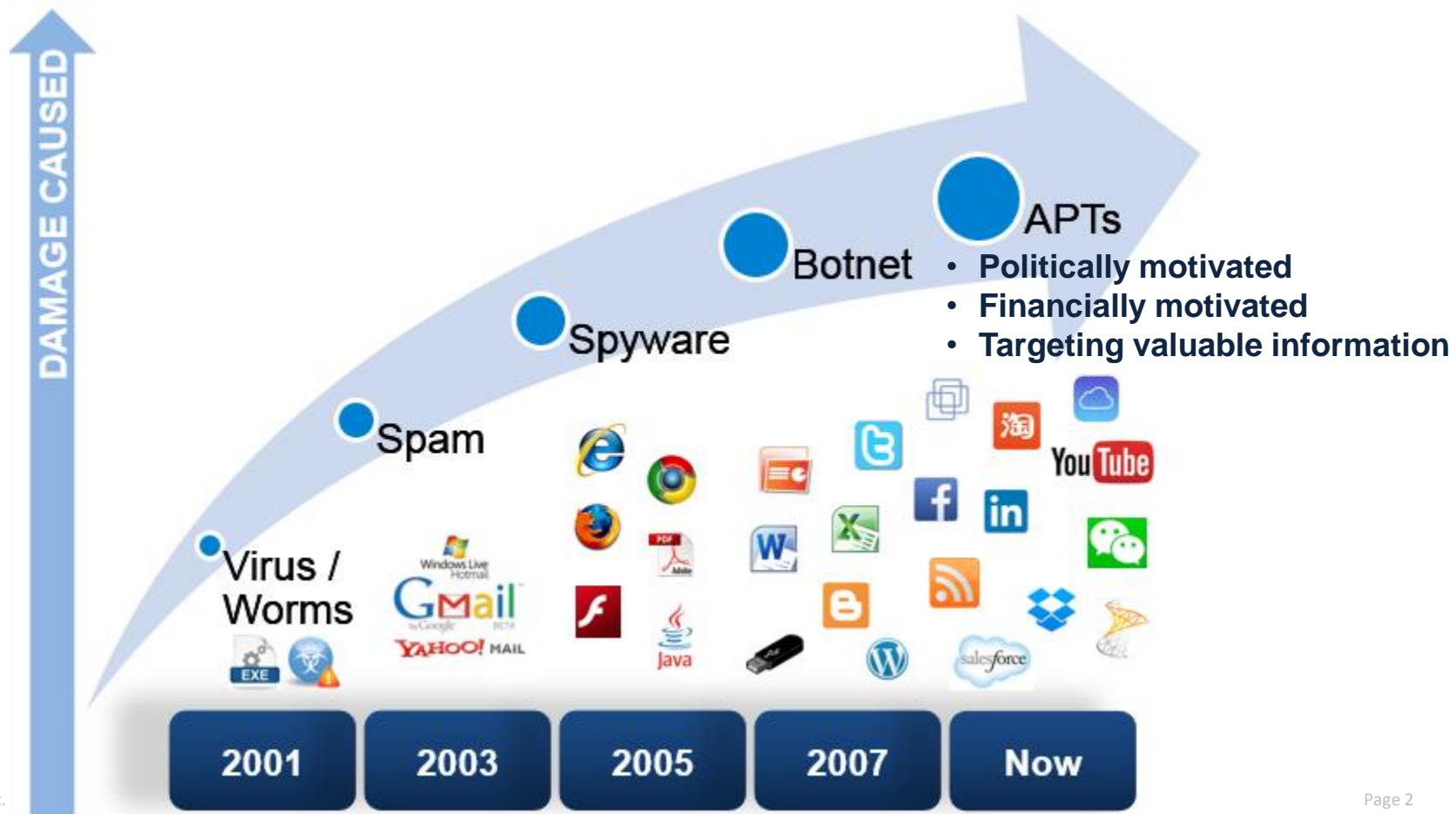
EFFECTIVE ADVANCED THREAT PROTECTION STRATEGY

Michael Tam, Websense

TRITON STOPS MORE THREATS. WE CAN PROVE IT.



websense®
TRITON™

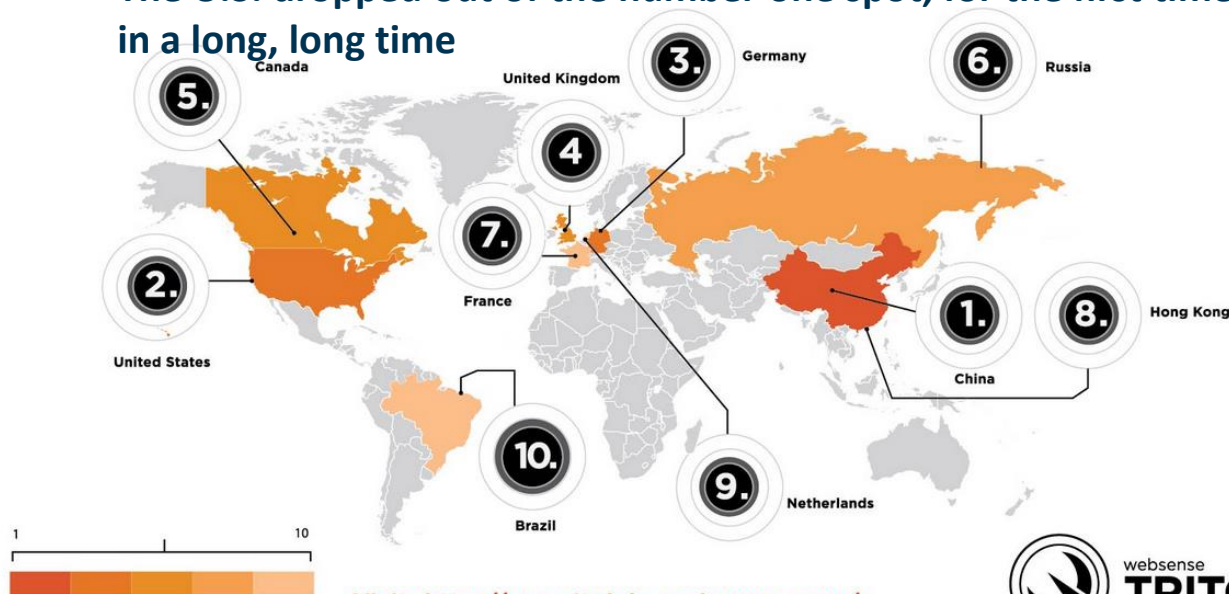


Top 10 Countries Hosting Phishing

1. China
2. United States
3. Germany
4. United Kingdom
5. Canada
6. Russia
7. France
8. Hong Kong
9. Netherlands
10. Brazil

Some interesting points about this list:

- China and Hong Kong made their debuts in 2013, having never before been included in our lists
- Chinese is now the 2nd most common spam language, overtaking Russian.
- The U.S. dropped out of the number one spot, for the first time in a long, long time



Sir/Madam

Upon your request, attached please find payment e-Advice for your reference.

Yours faithfully

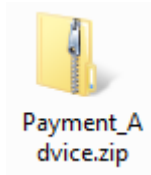
HSBC

We maintain strict security standards and procedures to prevent unauthorised access to information about you. HSBC will never contact you by e-mail or otherwise to ask you to validate personal information such as your user ID, password, or account numbers. If you receive such a request, please call our Direct Financial Services hotline.

Please do not reply to this e-mail. Should you wish to contact us, please send your e-mail to commercialbanking@hsbc.com.hk and we will respond to you.

Note: it is important that you do not provide your account or credit card numbers, or convey any confidential information or banking instructions, in your reply mail.

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- The email is sent from the spoofed address payment.advice@hsbc.com.hk
- The attached ZIP file has the name Payment_Advice.zip and contains the 96 kB file Payment_Advice.exe.
- 3 of the 50 AV engines did detect the Trojan at Virus Total.



SHA256: b45f2dbfe77dd2fec ef23a667d31e1fbf7a0857ba036527ea8285c7d4c989e40
File name: Payment Advice.zip*Payment Advice.exe
Detection ratio: 3 / 50
Analysis date: 2014-01-30 10:13:22 UTC



Chinese Hackers Stole Every New York Times Employee's Password

By Adam Martin



On Wednesday night, after enduring four months of hacking, the New York Times finally reported that its [computer network had been infiltrated](#) and that it had ousted its attackers, who it linked to the Chinese military. In the meantime, hackers stole every Times employee's corporate password, and used them to get into 53 employees' personal computers. The attacks started as the paper wrapped up reporting on its bombshell investigative piece about the [family wealth of Chinese Prime](#)

[Minister Wen Jiabao](#), and ramped up after publication of the story that, it was warned, would "have consequences."

Among the evidence pointing to Chinese government hackers, in addition to increasingly familiar tactics and the targeting of the reporters on the Wen story, was the fact that the attacks tended to start at 8 a.m. Beijing time and generally lasted for a workday before easing off. There was also this:

"Symantec, maker of the NYTimes's anti-virus software, which **found just 1 of the 45** pieces of custom malware installed on the Times servers. Not a ringing endorsement"

The
New York
Times

2%

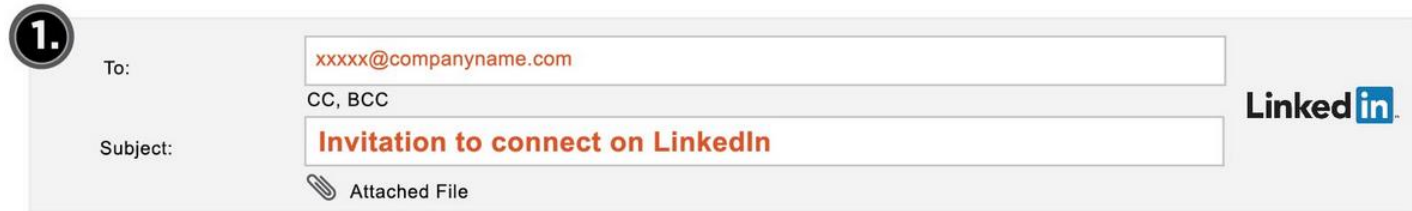
Detection
Rate



A fraudulent website with the domain name "http://ibc.bcdirecthk.com/Obs_Ign_Secure.php" and hosted in the British Virgin Islands. The website purports to be the official website of Bank of China (Hong Kong) Limited (BOCHK). BOCHK has clarified that it has no connection with the fraudulent website.

Five Most Dangerous Subject Lines

- 1. Invitation to connect on LinkedIn
- 2. Mail delivery failed: returning message to sender
- 3. Dear <insert bank name here> Customer
- 4. Comunicazione importante
- 5. Undelivered Mail Returned to Sender



Message:

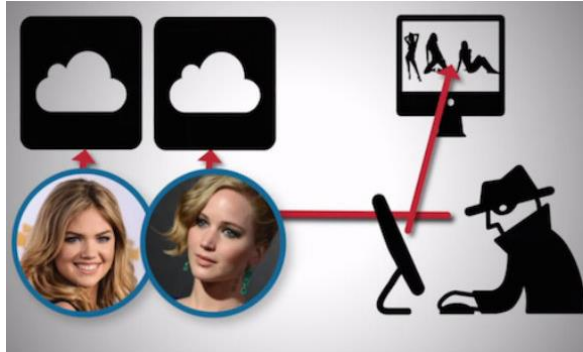




Target



The Home Depot



iCloud



Edward Snowden

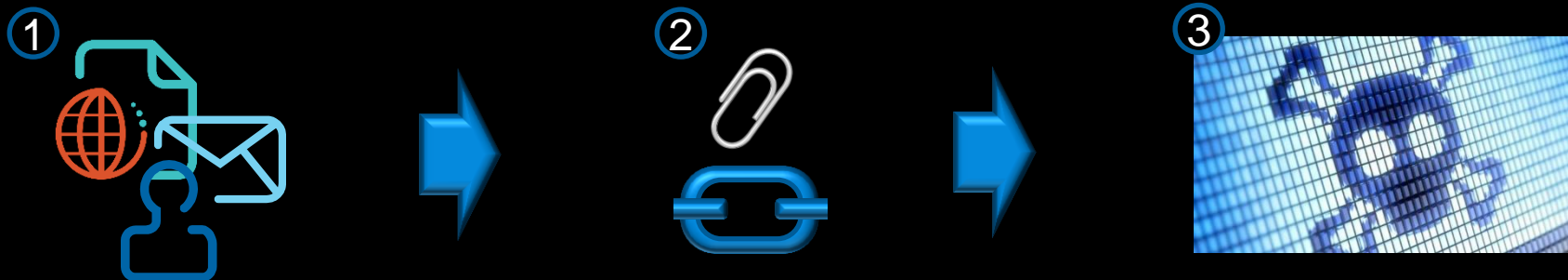
- **Target: Stolen information involved at least 70 million people**
- **The Home Depot: Affected 56 million payment cards**
- **iCloud: The accounts of some Hollywood actors and leaked their personal pictures online**
- **Edward Snowden: Only 10% of the NSA's collected data pertains to possible illegal activity**



“Signature based tools (anti-virus, firewalls, and intrusion prevention) are **only effective against 30-50% of current security threats.** Moreover, customers expect the effectiveness of signature-based security to **continue to decline rapidly.**”

IDC Threat Intelligence Update, 14-Feb-2012

Traditional Attack



Advanced Threat





Can You See Threats Across the Kill Chain?

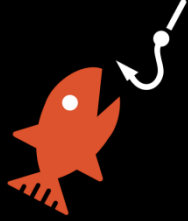
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01



RECON

02



LURE

03



REDIRECT

04



EXPLOIT
KIT

05



DROPPER
FILE

06



CALL
HOME

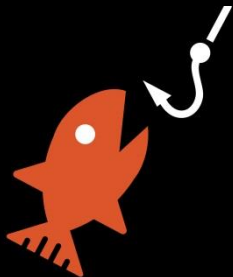
07



DATA
THEFT



RECON



LURE



REDIRECT



**EXPLOIT
KIT**



**DROPPER
FILE**



**CALL
HOME**

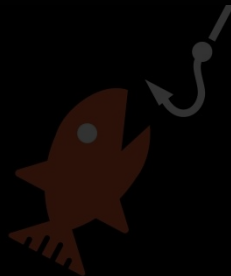


**DATA
THEFT**

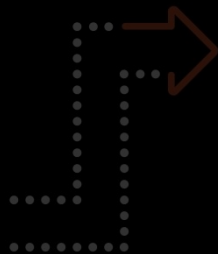




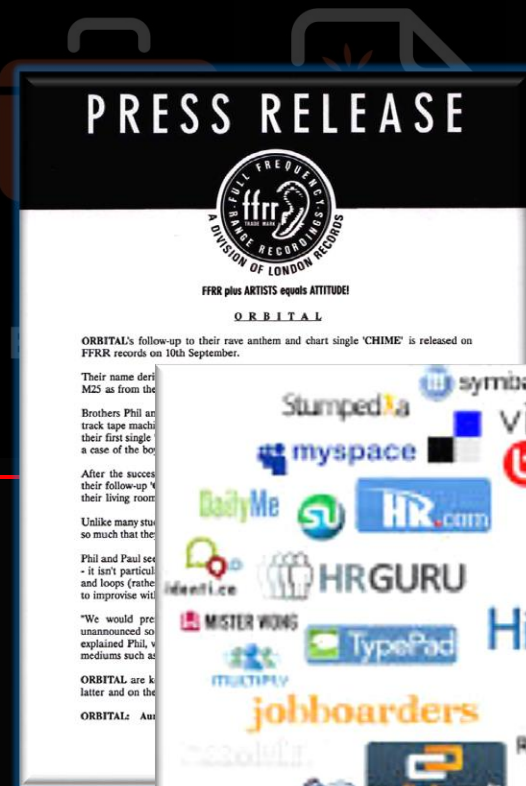
RECON



LURE



REDIRECT



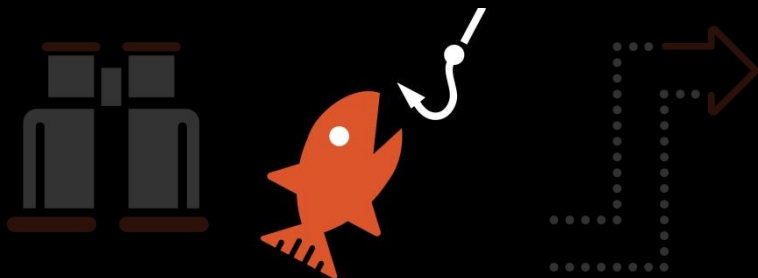
CALL



DATA

- Social Media
- Press
- Agency web site
- Insider





RECON

LURE

REDIRECT

EXPLOIT

- Mass Spam
- Social Media
- Targeted Email
- SMS

facebook

sent you a message.



January 13, 2011 at 6:15pm

Subject: Cheeck out the movies wsith yor ass in it.

hpPg/http://www.facebook.com

bit.ly/

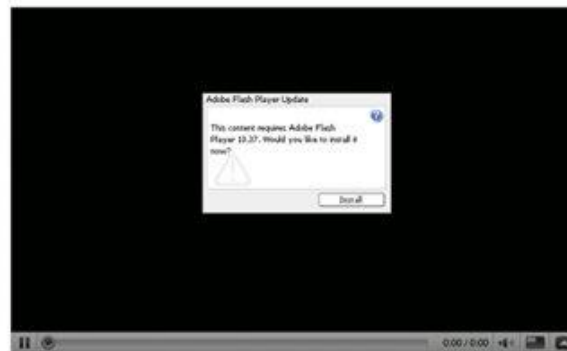
To reply to this message, follow the link below:

<http://www.facebook.com/n/?inbox%2Freadmessage.php&t=18162237317078>

WARNING: This website contains explicit adult material.

Sign Up | Contact Us | Help | Log Out

Video posted by ... Hidden Camera ...



From: ... Hidden Camera ...
Joined: 1 year ago
Videos: 5

[Subscribe](#)

Embed:

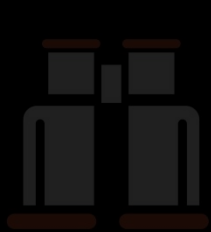
[Customize](#)

`[object width="425" height="344" class="movie"]`

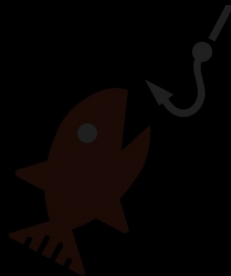
[More From user](#)

[Related videos](#)

Video Responses: [10](#) Text Comments: [20](#)



RECON



LURE



REDIRECT



EXPLOIT
KIT



DROPPER
FILE



CALL
HOME



DATA
THEFT

Evasion Techniques

- Bypass Filters
- Defies analysis

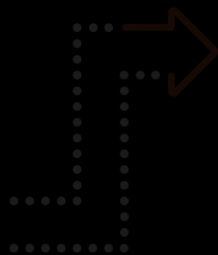




RECON



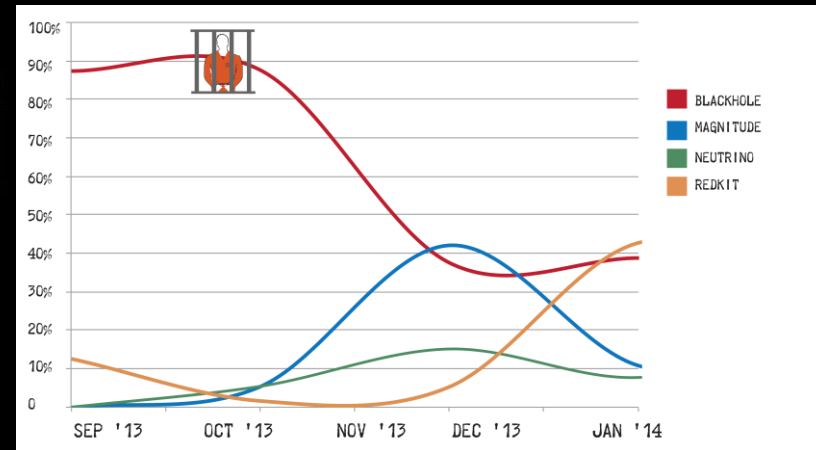
LURE



REDIRECT



EXPLOIT
KIT

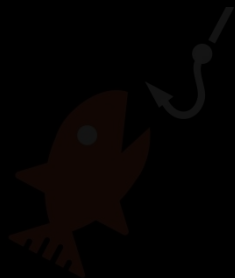


Penetrate Defenses

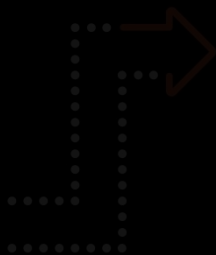
- OS Exploits
- Browser Exploits
- App Exploits



RECON



LURE



REDIRECT



EXPLOIT
KIT



**DROPPER
FILE**



CALL
HOME

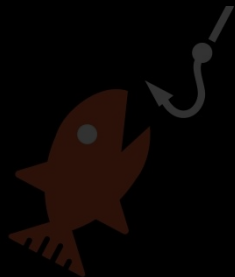


DATA
THEFT

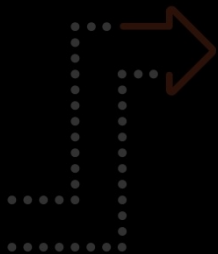
- File download
- Drive-by download
- Embedded code
- Nested objects



RECON



LURE



REDIRECT



EXPLOIT
KIT



DROPPER
FILE



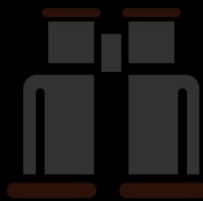
CALL
HOME



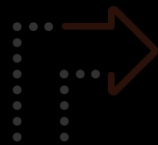
DATA
THEFT



- Botnet Mgmt
 - Connect
 - Update
- Evasion, such as Dynamic DNS
- Web, Email, etc.



RECON



DROPPER
FILE



CALL
HOME



DATA
THEFT

Cryptorbit

YOUR PERSONAL FILES ARE ENCRYPTED

All files including videos, photos and documents, etc on your computer are encrypted.

Encryption was produced using a **unique** public key generated for this computer. To decrypt files, you need to obtain the **private** key.

The single copy of the private key, which will allow you to decrypt the files, located on a secret server on the Internet; **the server will destroy the key after a time specified in this window.** After that, nobody and never will be able to restore files

In order to decrypt the files, open site **4sfxtg53imlvzk.onion.to/index.php** and follow the instructions.

If **4sfxtg53imlvzk.onion.to** is not opening, please follow the steps below:

1. You must download and install this browser:
<http://www.torproject.org/projects/torbrowser.html.en>
2. After installation, run the browser and enter the address:
4sfxtg53imlvzk.onion.to/index.php
3. Follow the instructions on the web-site. We remind you that the sooner you do, the more chances are left to recover the files.



Realize Objective

- Theft
- Destruction
- Corruption

PREDICTION
#1 Advanced malware volume will **DECREASE.**



(But this isn't good news.)

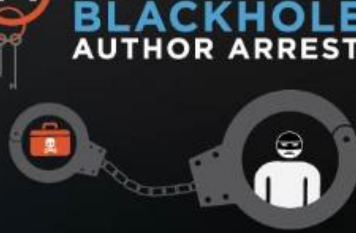
PREDICTION
#2 **A MAJOR** data-destruction attack will happen.



PREDICTION
#3 Attackers will be more interested in **CLOUD DATA** than your network.



PREDICTION
#4 **REDKIT, NEUTRINO** and other exploit kits will struggle for power in the wake of the **BLACKHOLE** AUTHOR ARREST.



PREDICTION
#5 Java will remain highly exploitable and **HIGHLY EXPLOITED** — with expanded repercussions.



PREDICTION
#6 Attackers will increasingly **LURE EXECUTIVES** and compromise organizations via professional social networks.



PREDICTION
#7 Cybercriminals will **TARGET** **THE WEAKEST LINKS** in the "data-exchange chain."



PREDICTION
#8 Mistakes will be made in **"OFFENSIVE"** security due to misattribution of an attack's source.



- 1. Advanced malware volume will decrease: Yes**
- 2. A major data-destruction attack will happen: Yes**
- 3. Attackers will be more interested in cloud data than your network: Yes**
- 4. Redkit, Neutrino and other exploit kits will struggle for power in the wake of the Blackhole author arrest: Yes**
- 5. Java will remain highly exploitable and highly exploited — with expanded repercussions: Yes**
- 6. Attackers will increasingly lure executives and compromise organizations via professional social networks: Yes**
- 7. Cybercriminals will target the weakest links in the data-exchange chain: Yes**
- 8. Mistakes will be made in “offensive” security due to misattribution of an attack’s source: Inconclusive**



**LIVE WEBCAST: Wednesday, Dec. 3, 2014
11 a.m. CST/HKT/SG**

www.websense.com/2015PredictionsAPAC

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THANK YOU

TRITON STOPS MORE THREATS. WE CAN PROVE IT.



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