

RSAC Studio

The Day My Kids Brought Home Malware

Kellman Meghu
@kellman



No certificate
trust was harmed
in the making of
this presentation.



The Barbie logo is written in a pink, cursive, handwritten-style font. It includes the word "Barbie" and "Dollarama" below it, all set against a pink gradient background.

Check Point®
SOFTWARE TECHNOLOGIES LTD.

RSA Conference 2015



The funnyjunk logo consists of the word "funnyjunk" in a stylized font. "funny" is in purple, "junk" is in green, and the "j" has a small "y" below it. The text is set against a black rectangular background.The Barbie logo features the word "Barbie" in a large, pink, cursive font. Below it, the word "Doll" is written in a smaller, pink, sans-serif font. There are small sparkles around the letters.

Check Point
SOFTWARE TECHNOLOGIES LTD.

RSA Conference 2015





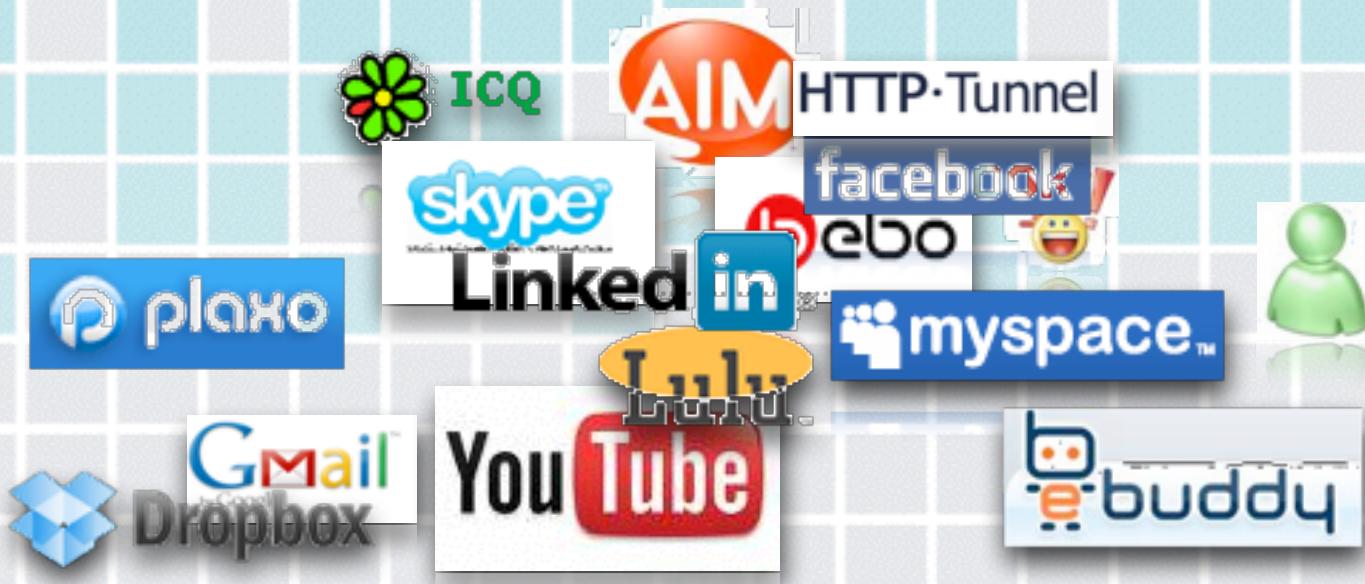
funnyjunk

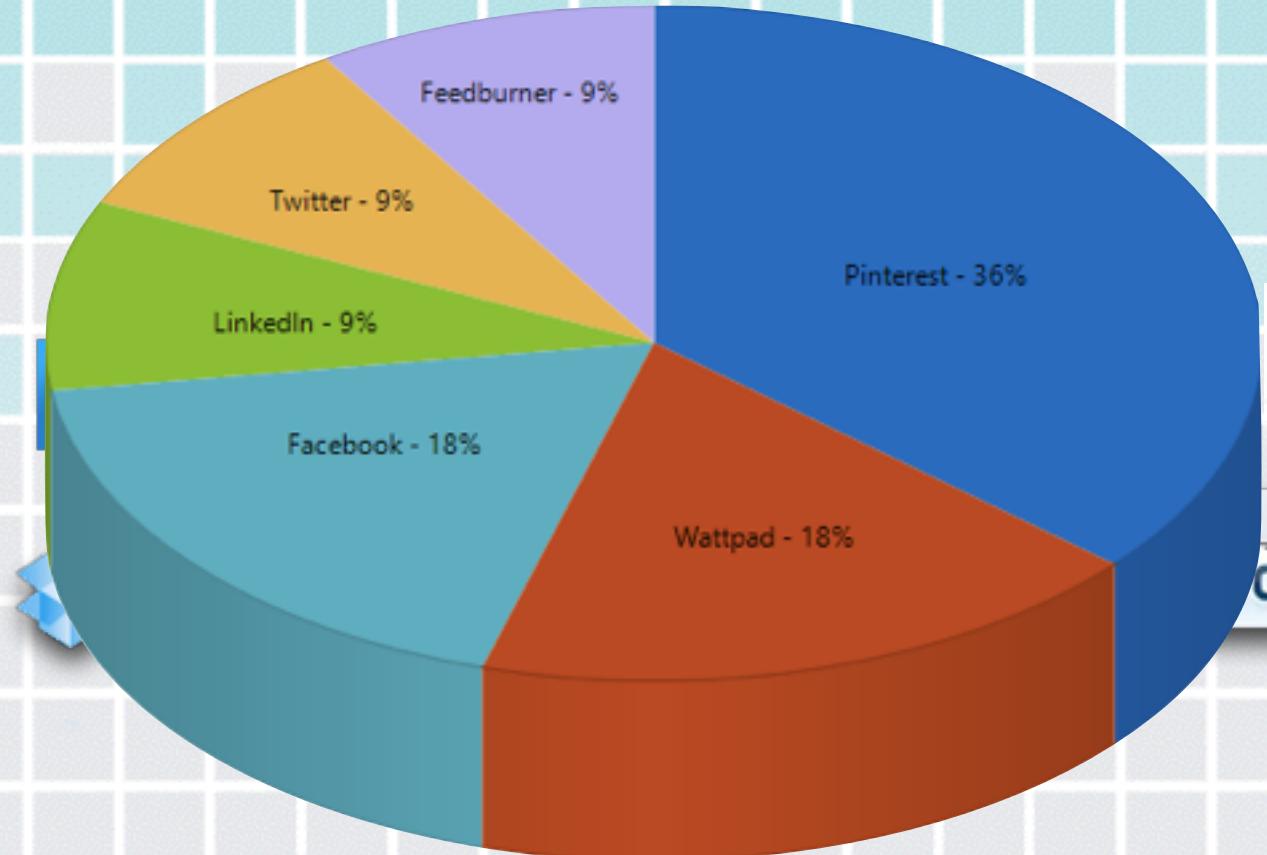
Barbie
Doll



<http://funnyjunk.com>
accessed









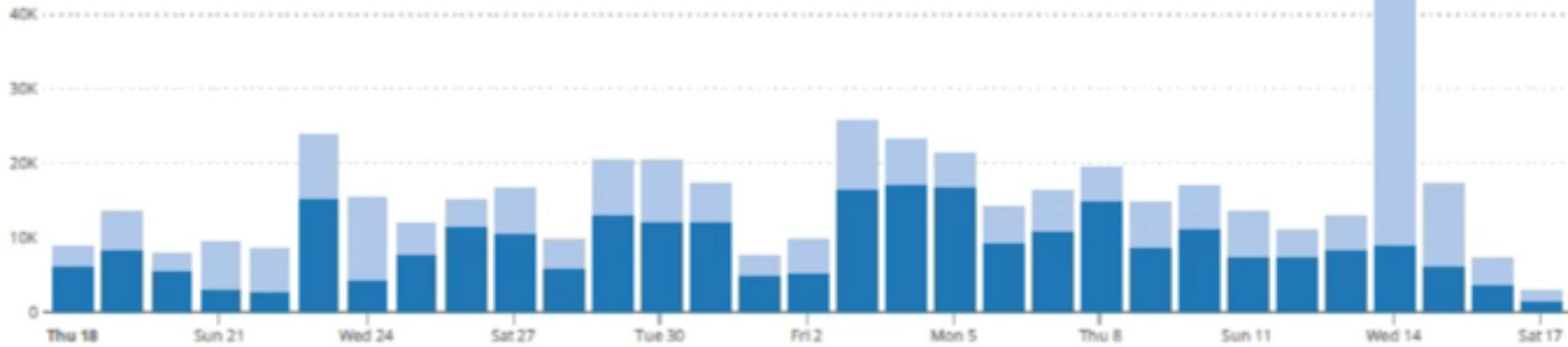
	Category Name
<input checked="" type="checkbox"/>	Adult/Sexually Explicit
<input checked="" type="checkbox"/>	Advertisements
<input checked="" type="checkbox"/>	Arts & Entertainment
<input checked="" type="checkbox"/>	Chat
<input checked="" type="checkbox"/>	Computing & Internet
<input checked="" type="checkbox"/>	Criminal Skills
<input checked="" type="checkbox"/>	Drugs, Alcohol & Tobacco
<input checked="" type="checkbox"/>	Education
<input checked="" type="checkbox"/>	Finance & Investment
<input checked="" type="checkbox"/>	Food Drink
<input checked="" type="checkbox"/>	Gambling
<input checked="" type="checkbox"/>	Games
<input checked="" type="checkbox"/>	Glamour & Intimate Apparel
<input checked="" type="checkbox"/>	Government & Politics
<input checked="" type="checkbox"/>	Hacking

Legend:

- Allow category
- Block category



Activity Timeline

● Application Control ● URL Filtering

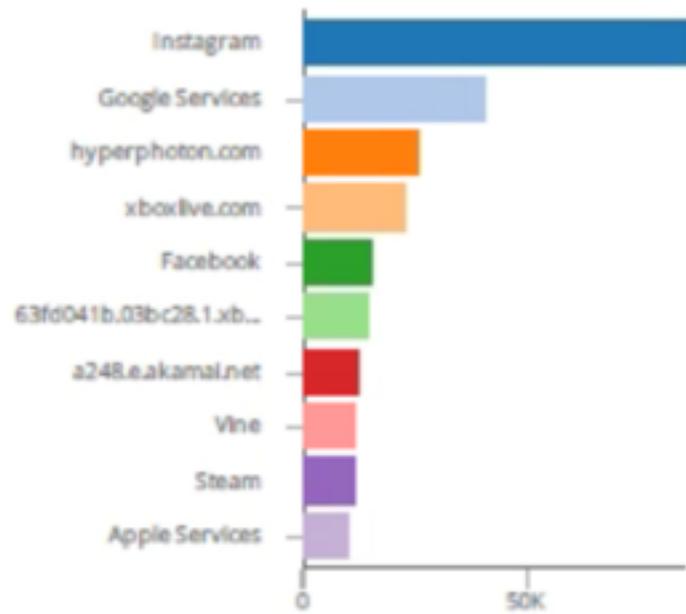
APPLICATION & URL FILTERING Report

Dec 18, 2014 12:00 AM - Jan 17, 2015 1:01 PM



General Activity

Top Applications



Top Categories



Seriously? This late??



Check Point[®]
SOFTWARE TECHNOLOGIES LTD.

Are you going to play on
YouTube all night?



Please, go to bed that's enough Media Sharing
for one night, don't you think?

No way, I'm going to stay up all night long!

Cancel

OK



Check Point[®]
SOFTWARE TECHNOLOGIES LTD.

RSA Conference 2015



I guess this is what I get for forging a note from my mom to my English teacher.. *sigh* — with Kellman Meghu.



You won't be going to Google Search

Just bring me a signed note from your mother, and I will lift the ban ;)



Have a great Birthday!

★HAPPY★
BIRTHDAY!



Enjoy your day

Before you go off for some Social Networking on  Facebook, just wanted to take a moment and wish you the best day ever, and happy (safe) internet browsing!

Love,

gatekeeper (your hard working firewall)

Cancel

OK



HomeNet



Source Country

Source

User

Protection Type

Protection Name

Lithuania

78-60-1-101.static.zebra...



Signature

GNU Bash Remote Co...

More**URL**<http://99.253.4.27/>**Event Name**

IPS

WEB Client TypeOther: 0 {:
}

echo BANG: \$(cat /etc/passwd)

Firewall Rule UID

73A87676-1346-4D64-BF13-E3E359B65DA1

Protection ID

asm_dynamic_prop_ZDBASHRCE



Anti-Bot & Anti-Virus / More / By Protection Name (By Number of Events)



Virus Incident: bypass

Copy Details

Actions

Anti-Virus

Summary

Details

Virus Details

Protection Name	REP.hston
Malware Activity	DNS query of a site known to contain malware
Severity	Low
Confidence Level	Medium
Protection Type	DNS Reputation
Scope	jawsvm (10.0.2.254)
Rule Name	Go to Policy
URL	ns3.changeip.org

Traffic

Source	jawsvm (10.0.2.254)
Destination	b0.org.affilia-nstorg (199.19.54.1)
Service	domain (udp/53)
Action	bypass
Direction	Outgoing

Event Detection

Start Time	11:34:15 22 Jun 2012
Active	Not completed
Origin	gatekeeper (10.0.2.1)
Detected By	frk (10.0.2.10)

More

Event Definition Name	Virus incident
Accepted connections	0
Blocked connections	0
Peak connections	1
Total connections	2
Job Name	All online jobs
Malware Rule ID	{000000ED-00E5-004C-99F5-9CF6F7EC2EF1}
Protection ID	0024FB198





Virus Incident: bypass



jawsvm (10.0.2.254)



REP.hston (DNS Reputation)

bypassed



DNS query of a site known to
contain malware



Low Severity



Medium Confidence



Today at 11:34

Recommended_Profile

General Properties:
- Anti-Bot Settings
- Anti-Virus Settings
- Malware DNS Trap

Malware DNS Trap

When a malware issues a DNS request the DNS answer is replaced with a bogus IP. Infected hosts trying to access the bogus IP are then identified as malicious. [Learn More...](#)

Resolve requests to
 IP of external interface in Security Gateway
 IP:

Internal DNS Servers

Add internal DNS servers to better identify the origin of malicious DNS requests:

Type to Search	1 item				
Name	IP Address	Comments			
jawsvm	10.0.2.254				



Anti-Bot & Anti-Virus / More / By Protection Name (By Number of Events)



Traffic

Source	 kellman-macair (10.0.2.210)  kellman
Destination	  gatekeeper (99.252.238.148)
Service	udp/53357
Action	 Prevent
Direction	 Outgoing

Event Detection

Start Time	11:38:45 23 Jun 2012
Active	Not completed
Origin	gatekeeper (10.0.2.1)
Detected By	trik (10.0.2.10)

More

Timeline View

Resolution: 1 Day

Manage ▾

Critical High Medium Low Informational / Very Low Unknown

Anti-Bot & Anti-Virus / Important Anti-Bot (By Number of Events)

4

Anti-Bot & Anti-Virus / Important Anti-Virus (By Number of Events)

Jun 23 2012	Jun 24 2012	Jun 25 2012	Jun 26 2012	Jun 27 2012	Jun 28 2012	Jun 29 2012	Jun 30 2012	Jul 01 2012	Jul 02 2012	Jul 03 2012	Jul 04 2012
----------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------

Anti-Bot & Anti-Virus / Most Important ▾

▼ C	▼	▼ Source	▼ User	▼ S...	▼	▼	▼ Protection Type	▼ Protection Name	▼ Malware Activity
+ 4		kyle-macpro (10.0.2.1...)	kyle	RED	2...	YEL	URL Reputation	Operator.EvadedTyphoo...	Communication with C&C



Apple Quicktime Heap Over...: Detect

Copy Details

Actions

IPS

Summary

Details

IPS

Attack Name	Apple QuickTime Protection Violation
Attack Information	Apple Quicktime heap overflow
Action	Detect
IPS Profile	Recommended_Protection
CVE List	CVE-2004-0431
Protection Type	Signature
Follow Up	
Performance Impact	Medium
Confidence Level	Medium
Resource	http://74.125.174.106/Mdeopl... Copy
Reason	--
Packet Capture	Packet Capture

Traffic

Source	kyle-macpro (10.0.2.190)
Destination	74.125.174.106
Service	http [tcp/80]
Direction	Outgoing

Event Detection

Start Time	17:39:42 24 Jun 2012
Active	Completed
Origin	gatekeeper (10.0.2.1)
Detected By	trik (10.0.2.10)

General Event Information

Event Name	Apple Quicktime Heap Overflow
Product Name	Check Point IPS Software Blade
Severity	High



Threat Description:

There is an integer overflow in the media file parsing mechanism within Apple QuickTime, a tool that allows users to play, create, and deliver multimedia.

There is a vulnerability in the media file parser within Apple QuickTime. It is possible for a remote attacker to execute arbitrary code on the victim's computer in the context of the victim user when they open a malicious QuickTime file.

It is expected that a vulnerable QuickTime program will terminate upon the launch of a malicious QuickTime file. The QuickTime application must be restarted for renewed QuickTime accessibility.

However, it is possible that a specially crafted QuickTime file will facilitate the execution of arbitrary code on the remote server in the context of the user opening or viewing the malicious file.

IPS Protection:

This protection will detect and block attempts to exploit this vulnerability.



Protection Details - Apple Quicktime Heap Overflow



General Network Exceptions Description Notes

Apple Quicktime Heap Overflow



Type

SignatureSeverity
HighConfidence Level
MediumPerformance Impact
MediumProtection Type
Clients

Sun Jun 17 2012 06:42:51 - Downloaded and automatically marked for follow up.

[Unmark](#)

Profile	Action	Override	Track	Exceptions
Default_Protection	Inactive	No	Log	None
Recommended_P...	Detect	No	Log	None



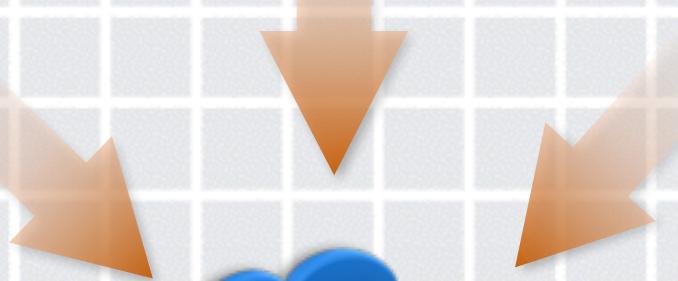
SensorNET



Bot addresses

Malware
Sites

Signatures



Check Point
ThreatCloud™



Check Point®
SOFTWARE TECHNOLOGIES LTD.

RSA Conference 2015



Cindy

To: Kellman Meghu

Fwd: F... es VIP Server Information

Check out this new little scam. Now, if I didn't know BETTER I may click that link several times over, but I DO KNOW BETTER.

----- Forwarded message -----



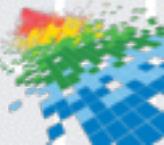
Log Details

Apple QuickTime Protection Violation

Log Info	General Event Information
Origin: gatekeeper	Attack Name: Apple QuickTime Protection Violation
Time: Yesterday 16:01:26	Attack Information: Apple QuickTime Targa file buffer overflow
Blade: IPS	Confidence Level: Medium
Product Family: Network	Performance Impact: Medium
Type: Log	Protection Name: Apple QuickTime Targa File Buffer Overflow
Policy	Protection Type: protection
Action: Reject	Protection ID: avm_dynamic_prop_AMSN20121108_11
Policy Name: Standard	Severity: High
Policy Date: 11/Dec/2013 23:36:01	Protection Exception: Add Exception...
Policy Management: fmk	Details
Rule: 7	Resource: http://userimages-akm.imvu.com/prodfiledata/14027964/2/eyebrows001_alpha.tga
Rule Name: Users on WiFi	More
Rule UID: 117AD8C88-95C9-4E1A-B048-A117386719	Industry Reference: CVE-2012-3755
Traffic	Proxy Source IP: 10.0.2.182
Source: taylor-air (10.0.2.182)	Reject ID: 52acc726-1000-1120000a-c0000000
Destination: 67.231.211.195	IPS Profile: Recommended_Protection
Service: http (TCP/80)	Session ID: 71cf9605
Interface Direction: outbound	Update Version: 634158234
Interface Name: eth1	
Protocol: TCP (6)	
Destination Port: 80	
Source Port: 58048	
Service Name: Mtp	
Source User Name: taylor	
User: taylor	



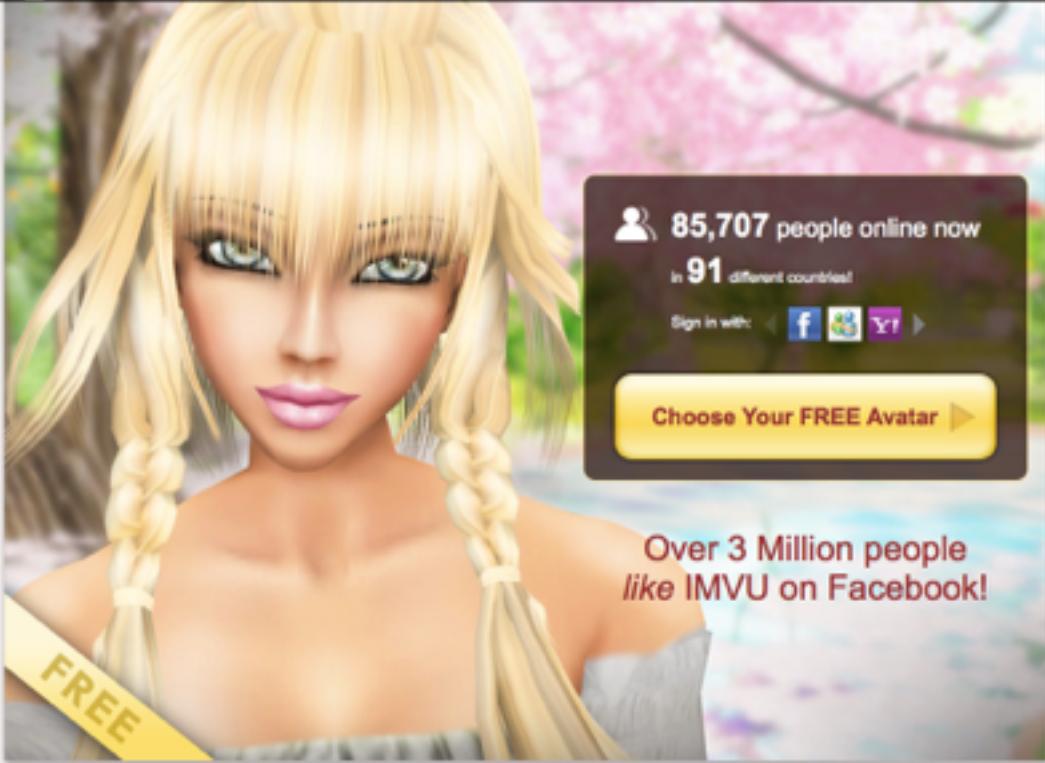
Time	B...	A...	Source	Source User N...	Destination	P...	S...	C...	P...	Attack Name	Attack Informa...	Interface
Yesterday	16:07:40			taylor-air	taylor					Apple QuickTim...	Apple QuickTim...	
Yesterday	16:05:40			taylor-air	taylor					Apple QuickTim...	Apple QuickTim...	eth1
Yesterday	16:05:27			taylor-air	taylor					Apple QuickTim...	Apple QuickTim...	
Yesterday	16:03:27			taylor-air	taylor					Apple QuickTim...	Apple QuickTim...	eth1
Yesterday	16:03:26			taylor-air	taylor					Apple QuickTim...	Apple QuickTim...	
Yesterday	16:01:26			taylor-air	taylor					Apple QuickTim...	Apple QuickTim...	eth1
Yesterday	16:01:16			taylor-air	taylor					Apple QuickTim...	Apple QuickTim...	
Yesterday	16:00:44			taylor-air	taylor					Apple QuickTim...	Apple QuickTim...	
Yesterday	15:59:16			taylor-air	taylor					Apple QuickTim...	Apple QuickTim...	eth1
Yesterday	15:58:44			taylor-air	taylor					Apple QuickTim...	Apple QuickTim...	eth1
Yesterday	15:58:38			taylor-air	taylor					Apple QuickTim...	Apple QuickTim...	
Yesterday	15:58:36			taylor-air	taylor					Apple QuickTim...	Apple QuickTim...	
Yesterday	15:56:38			taylor-air	taylor					Apple QuickTim...	Apple QuickTim...	eth1
Yesterday	15:56:36			taylor-air	taylor					Apple QuickTim...	Apple QuickTim...	eth1
Yesterday	15:56:36			taylor-air	taylor					Apple QuickTim...	Apple QuickTim...	eth1





Express yourself in the world's largest 3D Chat and Dress-Up community!

[Member Login](#)



85,707 people online now
in 91 different countries!

Sign in with:   

[Choose Your FREE Avatar ▶](#)

Over 3 Million people
like IMVU on Facebook!



Check Point®
SOFTWARE TECHNOLOGIES LTD.

RSA Conference 2015



Protection Details - Infinity Exploit Kit Landing Page



General Network Exceptions Description Notes

Attack ID: CPAI-2014-1622

Last Update: 29-January-2015

Industry References: [CVE-2014-0322](#) [CVE-2014-0502](#) [CVE-2013-1347](#) [CVE-2014-1776](#) [CVE-2013-2423](#) [CVE-2013-2465](#)

Source: IPS Research Team

Supported Products: Security Gateway: R77, R76, R75

Threat Description:

Infinity is a web exploit kit that operates by delivering a malicious payload to the victim's computer. Remote attackers can infect users with Infinity exploit kit by enticing them to visit a malicious web page.

Infinity Exploit Kit installs payloads on infected computer, which could result in data leakage and remote code execution.

IPS Protection:

This protection will detect and block Infinity exploit kit infection attempts.

Attack Detection:

OK

Cancel

Help



Content Protection Violation

Log Info		General Event Information	
Origin	gatekeeper	Attack Name	Content Protection Violation
Time	11/Feb/2015 06:24:58	Attack Information	Infinity Exploit Kit Landing Page
Blade	IPS	Confidence Level	Medium
Product Family	Network	Performance Impact	Medium
Type	Log	Protection Name	Infinity Exploit Kit Landing Page
Policy		Protection Type protection	
Action	Reject	Protection ID	asm_dynamic_prop_INFINITY9
Policy Name	Standard	Severity	High
Policy Date	11/Feb/2015 03:04:06	Protection Exception	Add Exception...
Policy Management	frik	More	
Rule	8	Industry Reference	CVE-2014-0322 , CVE-2014-0502 , CVE-2013-1347 , CVE-2014-1776 , CVE-2013-2423 , CVE-2013-2465
Rule Name	Users on Wifi	IPS Profile	Recommended_Protection
Rule UID	(17AD8C88-95C9-441A-BC4B-A1171B671	Suppressed Logs	11
Traffic		Total Logs	12
Source	kyle-gamerpc (10.0.2.191)		
Destination	54.236.87.143		
Destination Port	80		





The Day My Kids Brought Home Malware

Kellman Meghu

@kellman

