

Jun 2nd, 12:00 AM

Information Security

Mikko H. Hyppönen
F-Secure

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<https://docs.lib.purdue.edu/iatul/2014/keynotes/1>

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Information Security

 @mikko

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Current Sources of Cyber Attacks

Criminals



Hactivists



Governments



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Criminals: motivated by money

Hactivists: motivated by protest

Governments: espionage, cyber sabotage, cyber war







Banking Trojans
Ransom Trojans
Credit Card keyloggers



Bitcoin mining
DDoS botnets
Clickfraud

CryptoLocker

Your personal files are encrypted!



Your important files **encryption** produced on this computer: photos, videos, documents, etc. [Here](#) is a complete list of encrypted files, and you can personally verify this.

Encryption was produced using a **unique** public key **RSA-2048** 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...

To obtain the private key for this computer, which will automatically decrypt files, you need to pay **300 USD / 300 EUR** / similar amount in another currency.

Click «Next» to select the method of payment and the currency.

Any attempt to remove or damage this software will lead to the immediate destruction of the private key by server.

Private key will be destroyed on
9/13/2013
5:27 AM

Time left
71 : 19 : 53

Next >>



MANDIANT



Mandiant U.S.A. Cyber Security
FBI. Department of Defense
U.S.A. Cyber Crime Center



Remaining time: 47:54:33



MoneyPak



MoneyGram

IP: [redacted]

Country: US United States

Region: [redacted]

City: [redacted]

ISP: [redacted]

Operating System: Windows 7 (64-bit)

User Name: [redacted]



ATTENTION!

Your computer has been blocked up for safety reasons listed below.

You are accused of viewing/storage and/or dissemination of banned pornography (child pornography/zoophilia/rape etc). You have violated World Declaration on non-proliferation of child pornography. You are accused of committing the crime envisaged by Article 161 of United States of America criminal law.

Article 161 of United States of America criminal law provides for the punishment of deprivation of liberty for terms from 5 to 11 years.

Voucher NO/PIN

Value

1 2 3 4 5 6 7 8 9 0

Pay MoneyPak

Pay MoneyGram

How do I unblock the computer using the MoneyPak?

1. Find a retail location near you.
2. Look for a MoneyPak in the prepaid section. Take it to the cashier and load it with cash.
3. To pay fine you should enter the digits MoneyPak resulting pass in the payment form and press "Pay MoneyPak".



AGENCE NATIONALE DE LA SÉCURITÉ DES SYSTÈMES D'INFORMATION
Haute Autorité pour la Diffusion des Oeuvres et la Protection des Droits sur Internet

Temps restant: 47:59:15



IP: [REDACTED]

Pays: FR France
Region: [REDACTED]
Ville: [REDACTED]
ISP: [REDACTED]
Système d'exploitation: Windows 7 (64-bit)
Nom d'utilisateur: [REDACTED]

ATTENTION!

Votre ordinateur personnel est bloqué pour des raisons de sécurité suivantes.

Vous êtes accusé de visualisation/stockage et/ou de la distribution de matériel de caractère pornographique interdit (Pornographie juvénile/Bestialité/Viol, etc.) Vous avez violé la Déclaration universelle de la lutte contre la propagation de la pornographie juvénile et accusé d'un crime conformément à l'article 161 du Code pénal de la République Française.

L'article 161 du Code pénal de la République Française prévoit pour cela une peine d'incarcération allant de 5 à 11 ans.

Code PIN Valeur

100

1 2 3 4 5 6 7 8 9 0

A payer Ukash

A payer PaySafeCard

Où puis-je acquérir un Ukash?

Vous pouvez obtenir Ukash dans des centaines de milliers d'endroits du monde entier, sur Internet, des portefeuilles, kiosques et GAB.

www.beCHARGE.fr - Utilisez Ukash en ligne 24/7 avec Visa/MasterCard ou Carte Bancaire.

Tabac Presse - est disponible dans des milliers bureaux de tabac.



Serious Organised Crime Agency
METROPOLITAN BRITISH POLICE

Remaining time: **47:56:04**



IP: [REDACTED]	
Country: GB Great Britain	
Region: [REDACTED]	
City: London	
ISP: [REDACTED]	
Operating System: Windows 7 (64-bit)	
User Name: [REDACTED]	

ATTENTION!

Your computer has been blocked up for safety reasons listed below.

You are accused of viewing/storage and/or dissemination of banned pornography (child pornography/zoophilia/rape etc). You have violated World Declaration on non-proliferation of child pornography. You are accused of committing the crime envisaged by Article 161 of the Kingdom of Great Britain criminal law.

Article 161 of the Kingdom of Great Britain criminal law provides for the punishment of deprivation of liberty for terms from 5 to 11 years.

Voucher NO/PIN Value

1 2 3 4 5 6 7 8 9 0

Where can I get Ukash?

You could buy Ukash in many places, for example: shops, stalls, stand-alone terminals, on-line or through E-Wallet (electronic cash), from ePay, PayPoint and PayZone outlets.





شركة منطقة الرياض
وزارة الداخلية

مركز القيادة والسيطرة
قوات الأمن الخاصة
مركز المعلومات

الوقت المتبقي: 47:59:07

cashU

الرمز الشخصي CashU الكمية

1 2 3 4 5 6 7 8 9 0

دفع CashU

IP : [REDACTED]

بلد : SA Saudi Arabia

منطقة : [REDACTED]

مدينة : [REDACTED]

ISP : [REDACTED]

نظام التشغيل : Windows 7 (64-bit)

اسم المستخدم : [REDACTED]

تحذير! تم إغلاق جهاز الكمبيوتر الشخصي لأسباب تتعلق بالسلامة المدرجة أدناه.

أنت متهم بمرض / تخزين و/أو توزيع مواد إباحية محظورة (استغلال الأطفال / الإباحية / البيهيمية / اغتصاب، وما إلى ذلك). لقد انتيكت الإعلان العالمي بشأن مكافحة انتشار المواد الإباحية ومتهم بارتكاب جريمة بموجب المادة 161 من القانون الجنائي في المملكة العربية السعودية.

تنص المادة 161 من القانون الجنائي في المملكة العربية السعودية على عقوبة السجن من 5-11 عاما.

وكذلك يشتهر في أنك تمت بانتهاك "قانون حقوق النشر والتأليف" (تحميل الموسيقى المقرصنة، الفيديو، والبرمجيات غير الأصلية)، واستخدام و/أو توزيع محتويات محمية بموجب قانون حقوق النشر. وبذلك يشتهر في انتهاكك للمادة 148

أين يمكنك الحصول على قسيمة مالية CashU ؟

انتقل إلى www.CashU.com ، انتقل إلى احصل على كاش يو.

تدراء البطاقات المدفوعة مسبقا كاش يو (CashU) في مدينتك.



Jäljellä oleva aika: 47:53:50



IP: [REDACTED]

Maa: FI Finland
Alue: [REDACTED]
Kaupunki: [REDACTED]
ISP: [REDACTED]
Käyttöjärjestelmä: Windows 7 (64-bit)
Käyttäjätunnus: [REDACTED]

HUOMIO!

Titokonesi on lukittu turvallisuuden vuoksi allamainittujen syiden takia.

Sinut syytetään kielletyn pornograafisen aineiston (Lapsiporno/Zoofilia/Raiskaus jne.) katselusta/säilytyksestä ja/tai levityksestä. Sinä olet rikkoneet lapsipornografian levitystä vastaisen yleismaailmallisen julistuksen ja sinut syytetään Suomen tasavallan rikoslain lakipykälän 161 edellyttämään rikokseen.

Suomen tasavallan rikoslain lakipykälä 161 edellyttää rangaistuksena vapausrangaistusta 2-8 vuotta.

Pin-tunnus

Määrä

100

1 2 3 4 5 6 7 8 9 0

Maksaa PaySafeCard

Mistä voisin ostaa voucherin PaySafeCard?

Voit hankkia PaySafeCardin monista kaupoista sekä monilta huoltoasemilta ja kioskeilta. Voit ostaa PaySafeCard-kortteja maailmanlaajuisesti yli 450.000 myyntipisteestä. Suomessa PaySafeCard-kortteja myyvät kaikki R-Kioskit (R-kioski).












50,187
TWEETS

7,012
FOLLOWING

1,903,328
FOLLOWERS

 Follow

Tweets *All* / No replies



The Associated Press @AP 2m
Breaking: Two Explosions in the White House and Barack Obama is injured
Expand



The Associated Press @AP 25m
Democratic Sen. Baucus, Finance committee chairman, says he won't run for re-election: apne.ws/10blOOf -CJ
[View summary](#)



The Associated Press @AP 33m
BREAKING: Judge tosses 3 murder charges against Pa. abortion doc involving babies allegedly born alive.
Expand



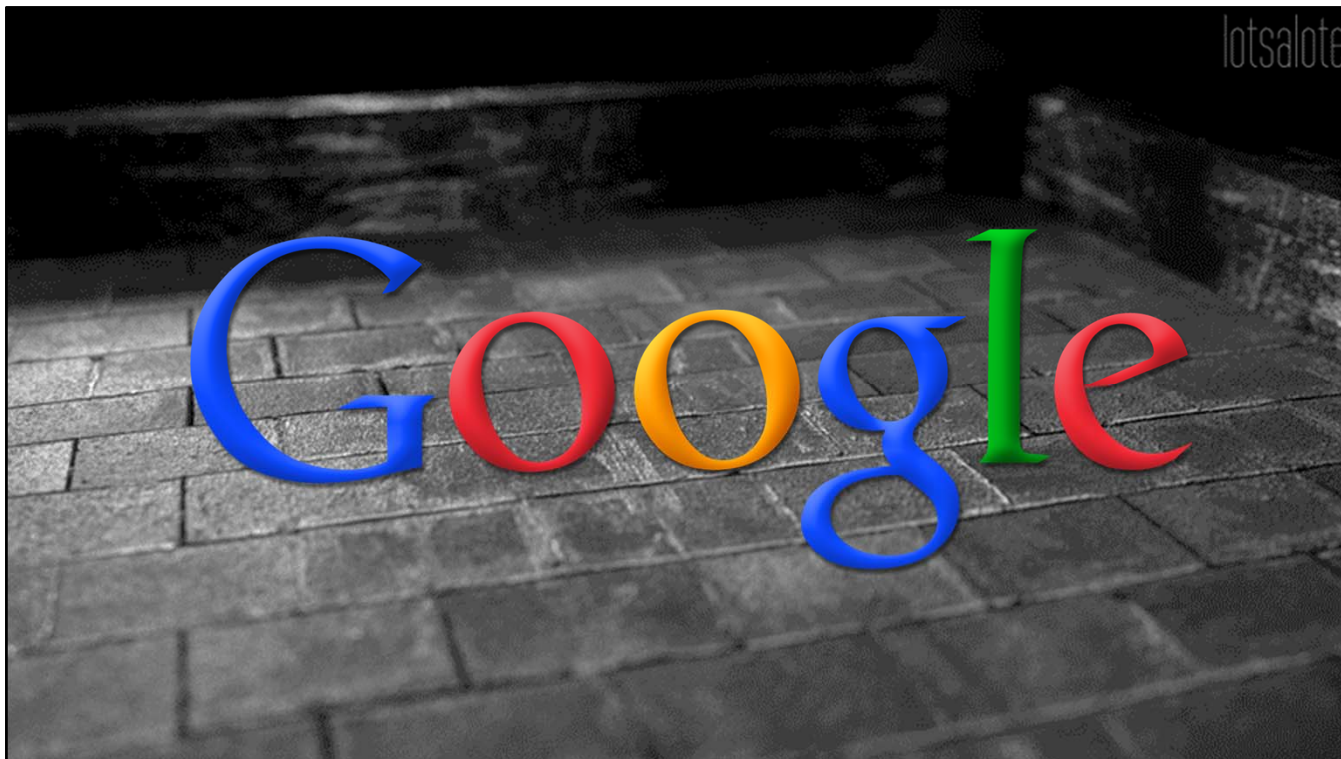


AP **The Associated Press @AP** 2m
 Breaking: Two Explosions in the White House and Barack Obama is injured
 Expand

Governments.

Writing Viruses.





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should i tell my girl|

should i tell my girlfriend **i cheated**

should i tell my girlfriend

should i tell my girlfriend **i love her**

should i tell my girlfriend **everything**

avoiding tax|

avoiding taxes

avoiding taxes **on sale of home**

avoiding taxes **on ira withdrawals**

avoiding tax **on amazon**

is my invention|

is my invention **a good idea**

is my invention **worth patenting**

is my invention **already patented**

is my invention **patentable**

rash on my genital area

rash on my **genital area**

rash on my **son's** genital area

rash **around** my genital area

i have a rash on my genital area

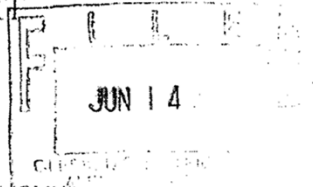
about 3,300,000 results (1/4 seconds)





UNITED STATES DISTRICT COURT

for the
Eastern District of Virginia



United States of America

v.

Edward J. Snowden

Case No. 1:13 CR 265 (GMH)

Defendant(s)

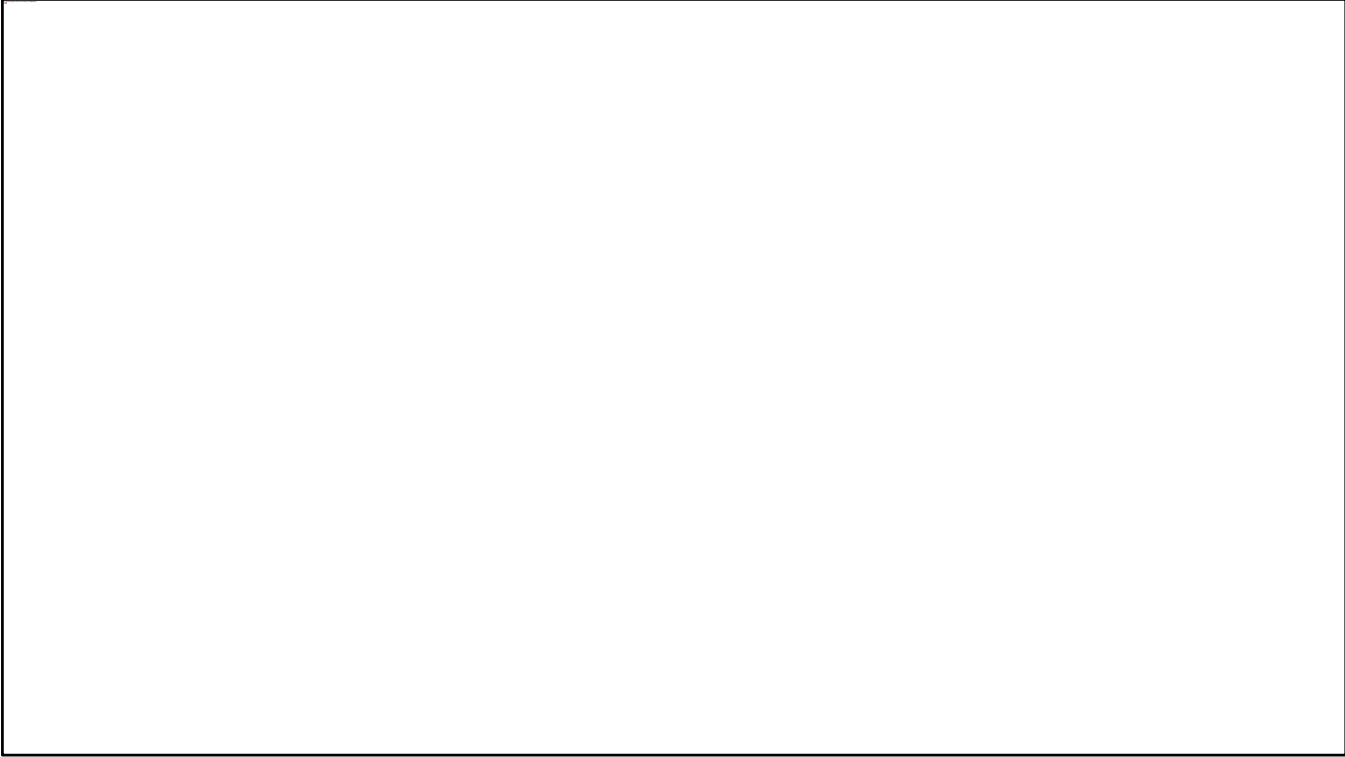
UNDER SEAL

CRIMINAL COMPLAINT

I, the complainant in this case, state that the following is true to the best of my knowledge and belief.

On or about the date(s) of May 2013 in the county of Not Applicable in the
Not Applicable District of Not Applicable, the defendant(s) violated:

<i>Code Section</i>	<i>Offense Description</i>
18 U.S.C. 641	Theft of Government Property
18 U.S.C. 793(d)	Unauthorized Communication of National Defense Information
18 U.S.C. 793(e)	Unauthorized Communication of Classified Communications Intelligence Information to

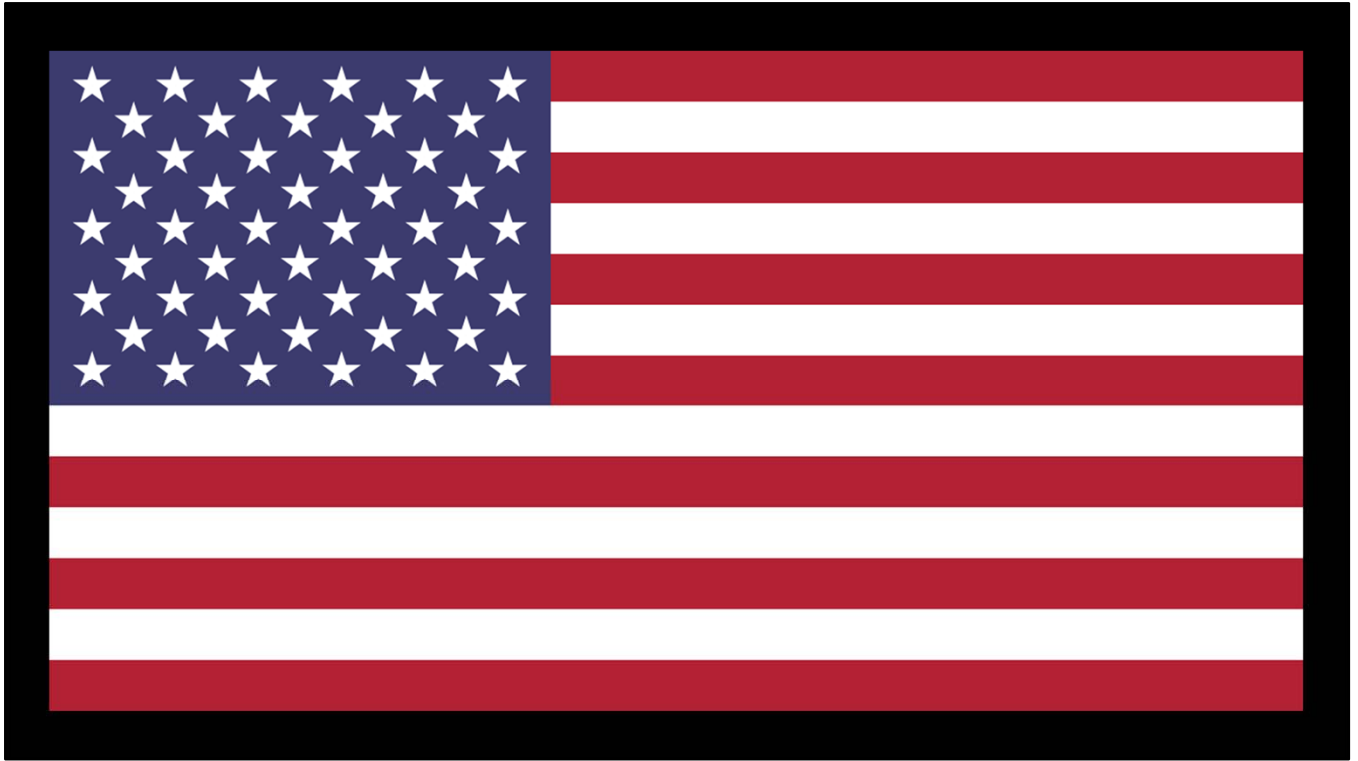




The White House ✓

@WhiteHouse





President Obama: "Six years ago, only 5% of the world's smartphones ran on American operating systems. Today, more than 80% do."



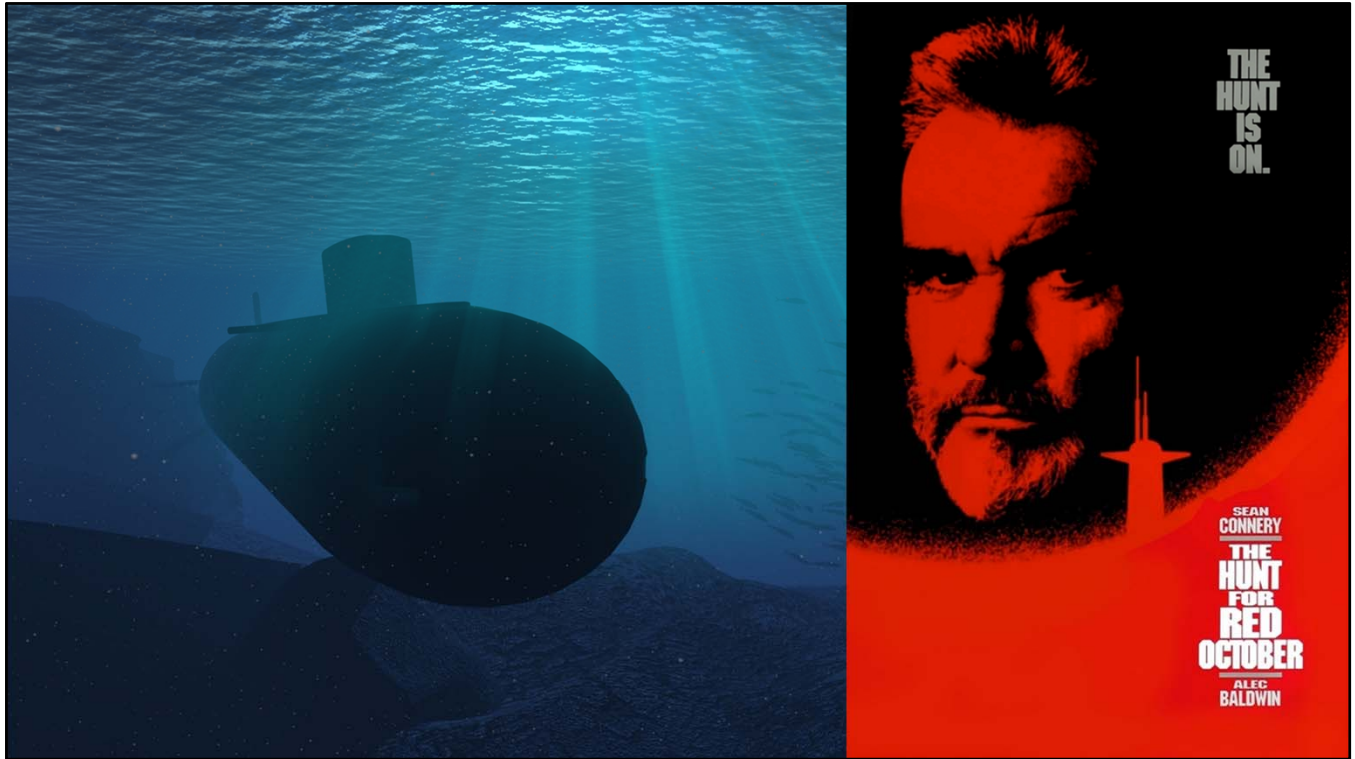
USA is on the wire

Simple Test

- Step 1: Name 5 large American internet companies
- Step 2: Name 5 large European internet companies

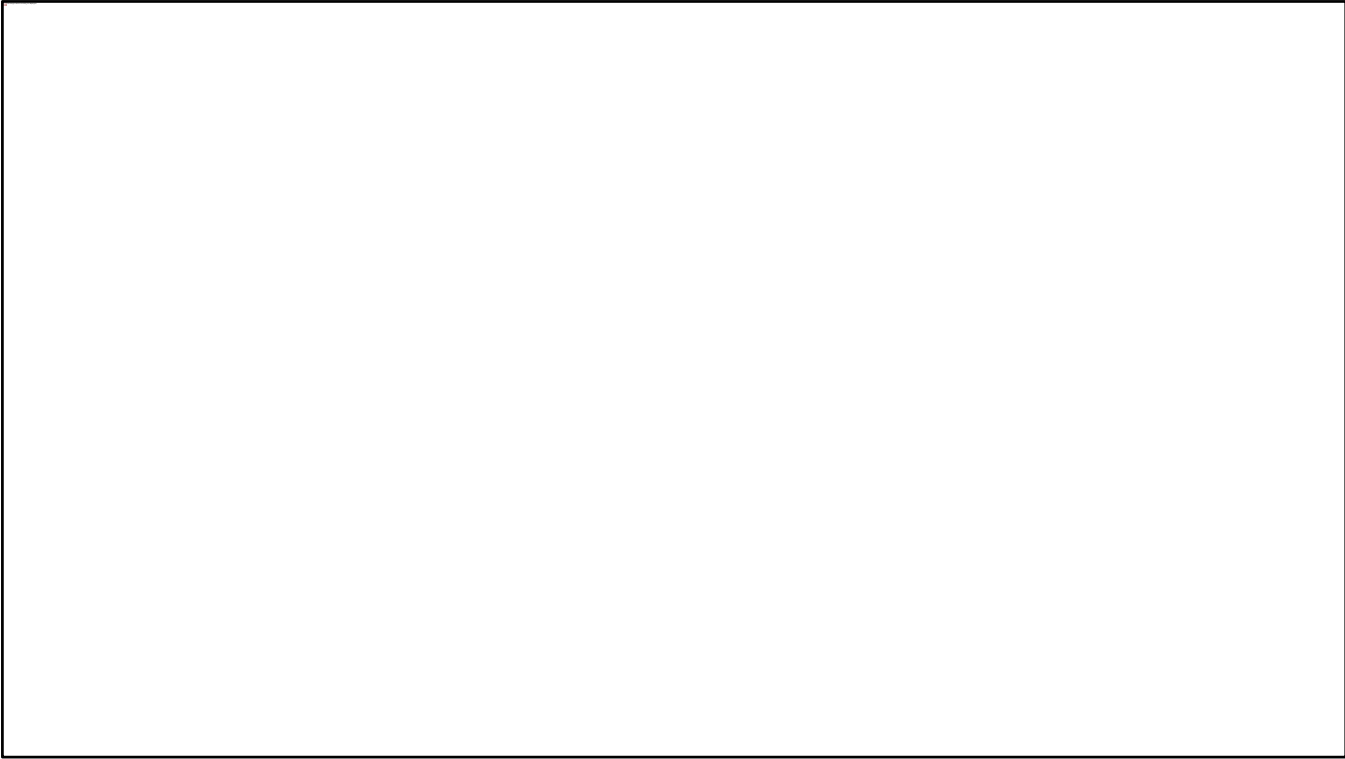
Rank	Company	Country of HQ location	Public	Software +Services 2012 (m€)	Total revenue 2012 (m€)	R&D employees 2012
1	SAP	DE		15 930.0	16 222.0	18 012
2	Dassault Systemes	FR		1 853.4	2 038.5	4 500
3	Sage	UK		1 591.4	1 675.1	1 391
4	Hexagon	SE		1 282.8	2 380.0	3 000
5	Wincor Nixdorf	DE		1 257.3	2 390.3	781
6	Asseco Group	PL		1 002.1	1 320.1	3 180
7	Software AG	DE		922.2	1 047.3	887
8	DATEV	DE		736.7	759.5	1 312
9	Wolters Kluwer	NL		733.4	3 597.0	2 312
10	SWIFT	BE		594.9	597.0	465
11	Acision	UK		516.4	516.4	486
12	Unit4	NL		469.8	469.8	1 325
13	Misys	UK		454.3	454.3	1 100
14	Swisslog	CH		403.7	540.9	79
15	Visma	NO		392.1	768.2	303

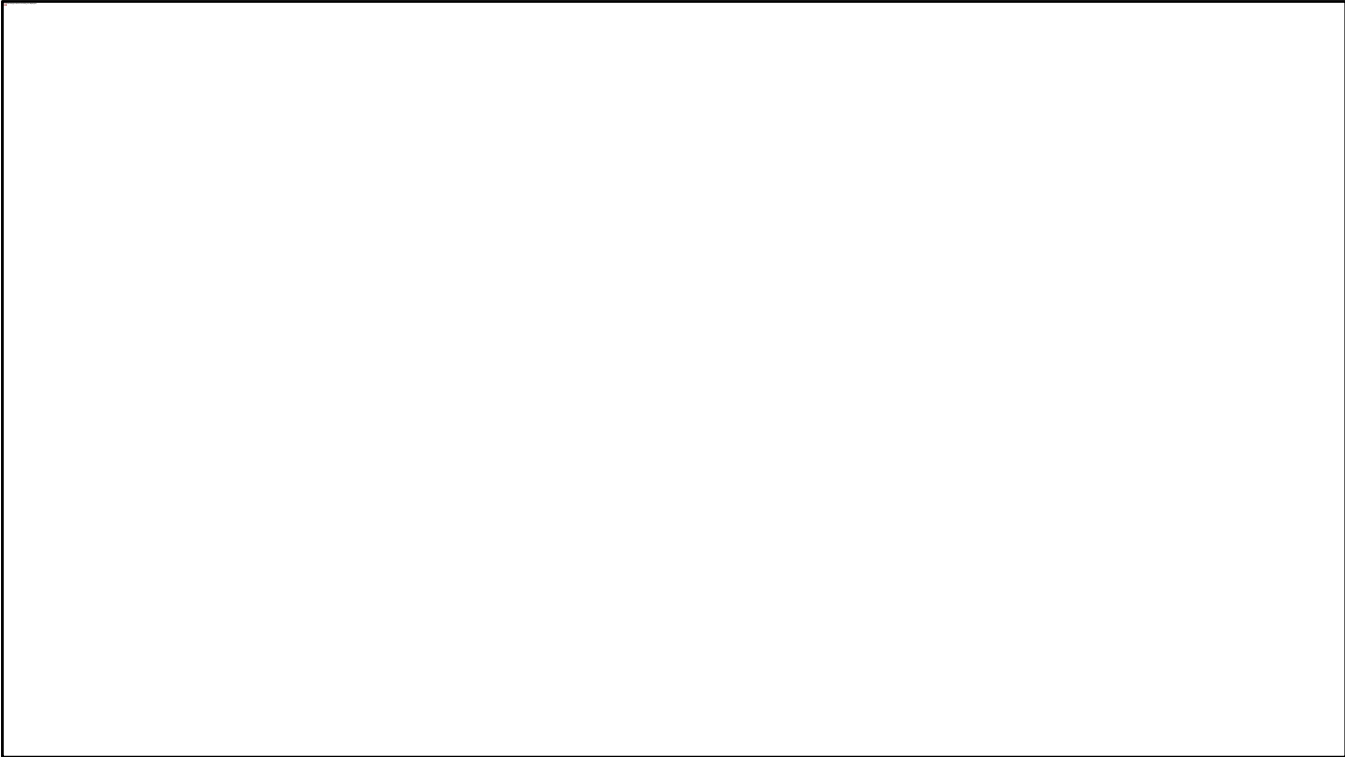
Source: Truffle 100



THE
HUNT
IS
ON.

SEAN
CONNERY
THE
HUNT
FOR
RED
OCTOBER
ALEC
BALDWIN





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